PART 70 OPERATING PERMIT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Rhodia Inc.
2000 Michigan Street
Hammond, Indiana 46320

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

<table>
<tr><td colspan="2">Operation Permit No.: T089-7258-00242</td></tr>
<tr><td>Issued by:_____
Janet G. McCabe, Assistant Commissioner
Office of Air Quality</td><td rowspan="2">Issuance Date: _____

Expiration Date:_____</td></tr>
<tr><td>Issued by:_____
Ronald L. Novak, Director
Hammond Department of Environmental Management</td></tr>
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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Hammond Department of Environmental Management (HDEM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary sulfuric acid regeneration unit which utilizes hazardous waste as a fuel.

Responsible Official:	Bill Colvin, Plant Manager
Source Address:	2000 Michigan Street Hammond, Indiana 46320
Mailing Address:	Same
SIC Code:	2819
County Location:	Lake
County Status:	Nonattainment for TSP, PM_{10}, SO_2, NO_2, O_3, VOC Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Package Boiler: One (1) natural gas fired boiler, constructed in 1980, rated at ninety-four point three (94.3) MMBtu per hour, exhausting at one (1) stack, identified as D011. The package boiler is used to provide supplemental plant steam when Unit #4 is not in operation or is unable to meet the demand.

(b) Unit 4 Preheater: One (1) natural gas fired furnace, constructed in April of 1962, rated at thirty-four (34) MMBtu per hour, exhausting at one (1) stack, identified as D021. The Unit 4 Preheater is used to heat-up the back half of the sulfuric acid regeneration unit following a prolonged shutdown.

(c) John Zink Furnace: One (1) natural gas fired furnace, constructed in October of 1981, rated at fifty-one (51) MMBtu per hour, exhausting at one (1) stack, identified as D031. The John Zink Furnace is used to heat-up the front half of the sulfuric acid regeneration unit following a prolonged shutdown.

(d) Sulfuric Acid Regeneration Unit (Unit 4): Unit 4 was constructed in 1958 and has a maximum acid production rate of 45.83 tons per hour. Raw materials fed to the unit include molten sulfur, spent sulfuric acid, and other sulfur-bearing materials. The unit includes one (1) industrial furnace firing natural gas, RCRA hazardous wastes and non-hazardous materials. The industrial furnace is rated at two hundred sixty (260) MMBtu per hour. Acid mist emissions from Unit 4 are controlled by a Brink's mist eliminator before exhausting

through one (1) stack, identified as D031. Sulfur dioxide emissions are controlled in the process by a double absorption system.

(e) Spent Sulfuric Acid Storage Tanks (#s 46, 47, 56, 57, 58): Five (5) spent sulfuric acid storage tanks, constructed in 1958, 1987, 1979, 1979, and 1979, respectively. The tanks have a total capacity of 2,650,000 gallons. Emissions from these tanks are controlled by the Unit 4 furnace or the caustic scrubber. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D051 when venting to the caustic scrubber. The furnace controls both sulfur dioxide and VOC emissions. The caustic scrubber only controls sulfur dioxide emissions, therefore, operating hour restrictions are placed on the time the spent acid storage tanks can be vented to the scrubber. Spent sulfuric acid tank trucks and railcars utilize the same control equipment during unloading activities and will be considered part of this emission unit.

(f) Hazardous Waste Storage Tanks (#s 72, 73, 74, 75): Four (4) hazardous waste storage tanks, constructed in October of 1985, with a capacity of 8,000 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. Hazardous waste tank trucks (except sulfur monochloride trucks covered under Section D.8) utilize the same control equipment during unloading activities and will be considered part of this emission unit. Some atmospheric venting of tank trucks occurs (during open-dome sampling, for example). The company considers these to be insignificant activities.

(g) Hazardous Waste Blend Tanks (#s 70, 71): Two (2) hazardous waste blend tanks, constructed in 1986 and 1985, respectively. The tanks have a capacity of 56,400 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. These tanks have been separated from the other hazardous waste tanks because they are covered by NSPS.

(h) Sulfur Monochloride Truck Unloading Station: One sulfur monochloride truck unloading station, constructed in 1995, with a maximum unloading rate of 50 tons per hour. HAPs released when sampling, breaking connections, or venting down sulfur monochloride containing trucks (when Unit 4 is not in operation) are controlled by a carbon adsorption system (CAS) which exhausts through a stack identified as D061.

(i) Molten Sulfur Storage Tank: One molten sulfur storage tank (tank 21R), constructed in June of 1997, with a capacity of 80,000 gallons. The tank exhausts to the atmosphere through a stack identified as D081. Molten sulfur tank truck unloading will be considered part of this facility.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.

(b) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

(c) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hr, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hr.

(d) Combustion source flame safety purging on startup.

(e) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(f) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(g) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(h) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(i) Refractory storage not requiring air pollution control equipment.

(j) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.

(k) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(l) Machining where an aqueous cutting coolant continuously floods the machining interface.

(m) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(n) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;

(2) having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(o) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(p) Closed loop heating and cooling systems.

(q) Cutting 20,000 linear feet or less of one inch (1") plate or equivalent.

(r) Using 80 tons or less of welding consumables.

(s) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(t) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(u) Forced and induced draft cooling tower system not regulated under a NESHAP.

(v) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(w) Heat exchanger cleaning and repair.

(x) Process vessel degassing and cleaning to prepare for internal repairs.

(y) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(z) Paved and unpaved roads and parking lots with public access.

(aa) Asbestos abatement projects regulated by 326 IAC 14-10.

(bb) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(cc) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(dd) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(ee) On-site fire and emergency response training approved by the department.

(ff) Gasoline generators not exceeding 110 horsepower.

(gg) Diesel generators not exceeding 1600 horsepower.

(hh) Stationary fire pumps.

(ii) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(jj) Purge double block and bleed valves.

(kk) Filter or coalescer media changeout.

(ll) Vents from ash transport systems not operated at positive pressure.

(mm) A laboratory as defined in 326 IAC 2-7-1(20)(c).

(nn) Hazardous and non-hazardous waste drum handling and storage area.

(oo) Hazardous and non-hazardous truck activities.

(pp) Hazardous and non-hazardous container sampling.

(qq) Molten sulfur unloading and storage.

(rr) Ash/brick handling and storage.

(ss) Commercial sulfuric acid storage, loading, and unloading operations (storage tank, rail car and truck).

(tt) Catalyst screening with particulate emission control.

(uu) Portable Brink for acid mist control during maintenance.

(vv) Painting of facility equipment.

(ww) Sand blasting.

(xx) Valves and flanges.

(yy) Roadway fugitive dust.

(zz) Acid filter precoat vent.

(aaa) Wastewater neutralization.

(bbb) Tank cleaning.

(ccc) Fresh acid loading.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22).

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 – Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

(a) Unless otherwise stated, all terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by IDEM, HDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by HDEM.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAQ, and HDEM within a reasonable time, any information that IDEM, OAQ, and HDEM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).). Upon request, the Permittee shall also furnish to IDEM, OAQ, and HDEM copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permitee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and HDEM on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and HDEM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMP’s shall be submitted to IDEM, OAQ, and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and HDEM. IDEM, OAQ, and HDEM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the

Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Mgt., Compliance Section)
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Telephone Number: 219-853-6306 (HDEM)
Facsimile Number: 219-853-6343 (HDEM)

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Permit Shield [326 IAC 2-7-15]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC

13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superceded by this permit.

(c) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:

(1) 40 CFR Part 60, subparts K, Ka and Kb do not apply to the spent acid storage tanks #s 46, 47, 56, 57, and 58. Tank 46 was constructed prior to the applicability dates. Tank 47 is exempt because the true vapor pressure of the contents is less than 3.5 kPa. Tanks #s 56, 57, and 58 meet the applicability section of subpart Ka but are not subject to any of the standards, testing or monitoring requirements of the subpart because the true vapor pressure of the contents is below 10.3 kPa. This essentially exempts tanks #s 56, 57 and 58 from subpart Ka's requirements. Also, 326 IAC 8-9 does not apply to tanks #s 46, 47, 56, 57, and 58 because the maximum true vapor pressure is below 0.5 psia.

(2) 40 CFR Part 63, Subpart Q, National Emissions Standard for Hazardous Air Pollutants for Industrial Process Cooling Towers does not apply to the Rhodia facility on the basis that the source's cooling towers do not operate with chromium-based water treatment chemicals.

(3) 326 IAC Article 19 Mobile Source Rules, and the CAA Title I Sec 182(d)(1)(B), related to employee trip reduction do not apply to the Rhodia facility on the basis that fewer than 100 person are employed at the facility.

(4) NSPS Subpart H does not apply to the source's sulfuric acid regeneration Unit 4 since the unit was installed prior to the applicability date and has not been modified or reconstructed since the applicability date.

(d) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, and HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(e) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(f) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(g) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(h) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, and HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]

(i) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and HDEM has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(c)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the Schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]. The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, and HDEM determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, or HDEM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, or HDEM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or HDEM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and HDEM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and HDEM on or before the date it is due.

(2) If IDEM, OAQ, and HDEM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and HDEM**,** takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and HDEM**,** any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, and HDEM fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Div., Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and HDEM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]

The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, HDEM, and U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy any records that must be kept under the conditions of this permit;

(c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, and HDEM within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ or HDEM, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Solid Waste Division
5925 Calumet Ave.
Hammond, Indiana 46320
The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ and HDEM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and HDEM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and HDEM, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than once every two (2) hours until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60 Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ or HDEM approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on 12/13/96.

(b) If the ERP is disapproved by IDEM, OAQ, and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(c) Upon direct notification by IDEM, OAQ, and HDEM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(c) A verification to IDEM, OAQ, and HDEM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68 on 6/16/99.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. This elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ and HDEM upon request and shall be subject to review and approval by IDEM, OAQ, and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, the Permitee may record the fact that the equipment is not operating or perform the required monitoring.

(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, and HDEM within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must

comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and HDEM on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and HDEM on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly, semiannual or annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years unless otherwise specified.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Package Boiler

Facility Description [326 IAC 2-7-5(15)]: One (1) natural gas fired boiler, rated at ninety-four point three (94.3) MMBtu per hour, exhausting at one (1) stack, identified as D011. The package boiler is used to provide supplemental plant steam when Unit #4 is not in operation or is unable to meet the demand. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter Limitation (PM_{10}) [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (d) (Lake County PM_{10} emission requirements), PM_{10} emissions from the package boiler shall not exceed 0.755 pounds per hour or 0.007 pounds per MMBtu.

D.1.2 Sulfur Dioxide (SO_2) [326 IAC 7-4-1.1]

Pursuant to 326 IAC 7-4-1.1(c) (Lake County sulfur dioxide emission limitations) the SO_2 emissions from the package boiler shall not exceed three tenths (0.3) pounds per MMBtu heat input.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or HDEM, compliance with the SO_2 and PM_{10} emission limits specified in Conditions D.1.1 and D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 PM_{10} Continuous Compliance [326 IAC 6-1-10.1]

Pursuant to the source's continuous compliance plan, continuous compliance with the PM_{10} emission limitation shall be demonstrated by measuring the volume of natural gas fired in the package boiler on an hourly basis and multiplying that volume by the corresponding AP-42 emission factor. The equation used to calculate PM_{10} emissions is as follows:

To determine PM10 emission rate in lbs/hr:

PM10 emissions =[measured gas volume (ft^3/hr)]*[AP-42 FACTOR (7.6 LB/10^6 FT^3)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

To document compliance with Condition D1.5**,** the Permittee shall calculate and record (on an hourly basis) the PM_{10} emission rate from the package boiler, in units of pounds per hour. The Permittee shall also record the quantity of natural gas fired in the package boiler (on an hourly basis) in units of cubic feet per hour.

D.1.7 Reporting Requirements

The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the package boiler during the preceding year. The quantity of natural gas shall be given in units of million cubic feet per year.

SECTION D.2 FACILITY OPERATION CONDITIONS

Unit 4 Preheater

Facility Description [326 IAC 2-7-5(15)]: One (1) natural gas fired furnace, rated at thirty-four (34) MMBtu per hour, exhausting at one (1) stack, identified as D021. The Unit 4 Preheater is used to heat-up the back half of the sulfuric acid regeneration unit following a prolonged shutdown. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter Limitation (PM_{10}) [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1(d) (Lake County PM_{10} emission requirements), PM_{10} emissions from the Unit 4 Preheater shall not exceed 0.230 pounds per hour or 0.007 pounds per MMBtu.

D.2.2 Sulfur Dioxide (SO_2) [326 IAC 7-4-1.1]

Pursuant to 326 IAC 7-4-1.1(c) (Lake County sulfur dioxide emission limitations) the SO_2 emissions from the Unit 4 Preheater shall not exceed three tenths (0.3) pounds per MMBtu heat input.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or HDEM, compliance with the SO_2 and PM_{10} emission limits specified in Conditions D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 PM_{10} Continuous Compliance [326 IAC 6-1-10.1]

Pursuant to the source's continuous compliance plan, continuous compliance with the PM_{10} emission limitation shall be demonstrated by measuring the volume of natural gas fired in the Unit 4 Preheater on an hourly basis and multiplying that volume by the corresponding AP-42 emission factor. The equation used to calculate PM_{10} emissions is as follows:

To determine PM10 emission rate in lbs/hr:

PM10 emissions =[measured gas volume (ft^3/hr)]*[AP-42 FACTOR (7.6 LB/10^6 FT^3)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.6 Record Keeping Requirements

To document compliance with Condition D2.5**,** the Permittee shall calculate and record (on an hourly basis) the PM_{10} emission rate from the Unit 4 Preheater, in units of pounds per hour. The Permittee shall also record the quantity of natural gas fired in the Unit 4 Preheater (on an hourly basis), in units of cubic feet per hour.

D.2.7 Reporting Requirements

The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the Unit 4 Preheater during the preceding year. The quantity of natural gas shall be given in units of million cubic feet per year.

SECTION D.3 FACILITY OPERATION CONDITIONS

John Zink Furnace

Facility Description [326 IAC 2-7-5(15)]: One (1) natural gas fired furnace, rated at fifty-one (51) MMBtu per hour, exhausting at one (1) stack, identified as D031. The John Zink Furnace is used to heat-up the front half of the sulfuric acid regeneration unit following a prolonged shutdown. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 There are no specific emission limitations applicable to this facility.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.4 Parametric Monitoring

The Permittee shall measure the quantity of natural gas burned in the John Zink Furnace on an annual basis.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.5 Record Keeping Requirements

The Permittee shall record the quantity of natural gas fired in the John Zink Furnace (on a yearly basis), in units of million cubic feet per year.

D.3.6 Reporting Requirements

The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the John Zink Furnace during the preceding year. The quantity of natural gas shall be given in units of million cubic feet per year.

SECTION D.4 FACILITY OPERATION CONDITIONS

Sulfuric Acid Regeneration Unit (Unit 4)

Facility Description [326 IAC 2-7-5(15)]: Unit 4 has a maximum acid production rate of 45.83 tons per hour. Raw materials fed to the unit include molten sulfur, spent sulfuric acid, and other sulfur-bearing materials. The unit includes one (1) industrial furnace firing natural gas, RCRA hazardous wastes and non-hazardous materials. The industrial furnace is rated at two hundred sixty (260) MMBtu per hour. Acid mist emissions from Unit 4 are controlled by a Brink's mist eliminator before exhausting through one (1) stack, identified as D031. Sulfur dioxide emissions are controlled in the process by a double absorption system. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM_{10}) [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (d) (Lake County PM_{10} emission requirements), acid mist emissions from Unit 4 shall not exceed 6.958 pounds per hour or 0.150 pounds per ton of 100% sulfuric acid produced.

D.4.2 Sulfur Dioxide (SO_2) [326 IAC 7-4-1.1]

Pursuant to 326 IAC 7-4-1.1(c) (Lake County sulfur dioxide emission limitations) the SO_2 emissions from Unit 4 shall not exceed seven hundred eighty-two (782) pounds per hour, on a three (3) hour average basis.

D.4.3 Hazardous Air Pollutants (HAPs) [326 IAC 20-23-1]

(a) Pursuant to 40 CFR Part 61, Subpart FF (National Emission Standard for Benzene Waste Operations), the Permittee shall operate and maintain an industrial furnace for which a final permit has been issued under 40 CFR part 270 and operated in accordance with the requirements of 40 CFR Part 266, Subpart H. Pursuant to 40CFR Part 63, Subpart DD (National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations) and 326 IAC 20-23-1, HAPs contained in the off-site material stream shall be destroyed in the industrial furnace. As per Subpart FF, this industrial furnace shall achieve a destruction efficiency of at least ninety-nine percent (99%) for benzene.

(b) Pursuant to 40 CFR Part 61, Subpart FF the Permittee shall annually demonstrate that the flow-weighted annual average benzene concentration in the Unit 4 wastewater is less than 10 ppmw as determined by the procedures specified in 40 CFR 61.355 (c)(2) or 40 CFR 61.355 (c)(3).

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is required to perform an annual performance test on Unit 4 in order to demonstrate compliance with the acid mist and sulfur dioxide emission limits established in

Conditions D.4.1 and D.4.2, respectively. The tests shall be performed utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C-Performance Testing.

D.4.6 Control of Particulate Emissions (PM_{10})

Unit 4 shall be vented to the final Brink's mist eliminator at all times while the unit is in operation.

D.4.7 Control of Hazardous Air Pollutants (HAPs)

Pursuant to 40 CFR Part 61, Subpart FF, each opening in the industrial furnace shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

D.4.8 Continuous Emissions Monitoring Requirement [326 IAC 7-4-1.1(c)]

Pursuant to 326 IAC 7-4-1.1(c), the Permittee is required to operate a continuous emission monitoring system (CEMS) in the stack serving Unit 4. The CEMS shall be operated and maintained in accordance with an IDEM and HDEM approved standard operating procedure (SOP) submitted to the agencies by the Permittee. The CEMS shall be maintained in accordance with procedures established in Section C.13 - Maintenance of Monitoring Equipment.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.9 Parametric Monitoring

Pursuant to 40 CFR Part 61, Subpart FF, the pressure in the industrial furnace shall be monitored continuously to ensure that the pressure remains below atmospheric pressure. The Compliance Response Plan for this unit shall contain troubleshooting, contingency and response steps for when the pressure reading greater than or equal to atmospheric pressure for any one reading. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit.

D.4.10 PM_{10} Continuous Compliance [326 IAC 6-1-10.1]

(a) Pursuant to the source's continuous compliance plan, continuous compliance with the acid mist emission limitation shall be demonstrated by calculating the sulfuric acid production rate and multiplying that rate by an acid mist emission factor obtained from the most recent performance test. The acid mist emission factor will be obtained by dividing the highest acid mist emission rate measured during the test by the lowest sulfuric acid production rate. The equation used to calculate acid mist emissions is as follows:

<u>To determine acid mist emission rate in lbs/hr:</u>

Acid mist emissions =[emission factor from stack test (lb/ton)]*[production rate (tons/hr)]

(b) Pursuant to the source's continuous compliance plan, the pressure drop across the final Brink's mist eliminator shall not exceed ten (10) inches of water column.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.11 Record Keeping Requirements

(a) To document compliance with Condition D.4.10(a), the Permittee shall calculate and record (on an hourly basis) the acid mist emission rate from Unit 4, in units of pounds per hour.

(b) To document compliance with Condition D.4.3(b), all records of benzene testing performed on the Unit 4 wastewater shall be maintained and made available to HDEM and IDEM inspectors upon request.

(c) To document compliance with Condition D.4.10(b), the pressure drop across the final Brink's mist eliminator shall be recorded once each eight (8) hour shift.

(d) To document compliance with Condition D.4.2, the quantity of sulfur dioxide emitted from the Unit 4 stack shall be recorded on an hourly basis, in units of pounds per hour.

(e) To document compliance with Condition D.4.1, the quantity of sulfuric acid produced (on a 100% H2SO4 equivalent basis) by Unit 4 shall be recorded hourly, in units of tons per hour.

(f) The Permittee shall record the quantity of natural gas burned in the Unit 4 furnace on an hourly basis, in units of million cubic feet per hour.

(g) The Permittee shall record the quantity of hazardous waste burned in the Unit 4 furnace on an minutely basis, in units of pounds per minute.

(h) The Permittee shall record the quantity of spent acid fed to the Unit 4 furnace on a minutely basis, in units of pounds or gallons per minute.

(i) The Permittee shall record the quantity of molten sulfur fed to the Unit 4 furnace on a minutely basis, in units of pounds per minute.

(j) The Permittee shall record the quantity of chlorides fed to the Unit 4 furnace per minute, in units of pounds per minute.

D.4.12 Reporting Requirements

(a) Pursuant to 326 IAC 7-4-1.1(c), the Permittee shall submit a report to IDEM, OAQ, and HDEM 30 days after the end of each calendar quarter. The report shall contain the following information:

(1) The daily average sulfur dioxide concentration in the stack gas (as measured by the CEMS) expressed in parts per million, stack gas flow rate in standard cubic feet per minute, and sulfur dioxide emission rate in pounds per hour for each day during the calendar quarter.

(2) The dates and times for any period during the quarter when the CEMS was not in operation or not functioning correctly.

(3) The hourly emission rates for any day(s) during the quarter in which the three hour average emission rate exceeded 782 pounds per hour.

(b) The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the Unit 4 furnace (in units of million cubic feet per year), the quantity of alternative fuels burned in the Unit 4 furnace (in units of million pounds), the quantity of spent acid fed to the Unit 4 furnace (in units of tons), the quantity of 100% sulfuric acid produced by Unit 4 (in units of tons per year), and the quantity of chlorides fed to the Unit 4 furnace (in units of tons per year) during the preceding year.

SECTION D.5 FACILITY OPERATION CONDITIONS

Spent Sulfuric Acid Storage Tanks (#s 46, 47, 56, 57, 58)

Facility Description [326 IAC 2-7-5(15)]: Five (5) spent sulfuric acid storage tanks with a total capacity of 2,650,000 gallons. Emissions from these tanks are controlled by the Unit 4 furnace or the caustic scrubber, should the furnace not be in operation. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D051 when venting to the caustic scrubber. The furnace controls both sulfur dioxide and VOC emissions. The caustic scrubber only controls sulfur dioxide emissions, therefore, operating hour restrictions are placed on the time the spent acid storage tanks can be vented to the scrubber. Spent sulfuric acid tank trucks utilize the same control equipment during unloading activities and will be considered part of this emission unit. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Volatile Organic Compounds (VOCs) [Hammond Ordinance No. 3522, Section 4.1]

This facility shall be limited to 4000 hours venting to the caustic scrubber on a 12 month rolling average basis. This operating hour limit is utilized to limit the potential to emit of VOC to less than 25 tons per year.

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.5.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or HDEM, compliance with the VOC emission limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.5.4 Control of Volatile Organic Compounds (VOCs)

The spent acid storage tanks shall be vented to either the Unit 4 furnace or the caustic scrubber at all times the tanks contain spent acid. The Unit 4 furnace and caustic scrubber shall be in operation while the spent acid storage tanks are being vented to them. The Unit 4 furnace shall be operating in accordance with Section D.4 at all times when the spent acid storage tanks are being vented to it. The caustic scrubber shall be operating in accordance with Condition D.5.5 at all times while the spent acid storage tanks are vented to it.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.5 Parametric Monitoring

The Permittee shall maintain the effluent liquor of the packed-column scrubber at a pH of seven (7) or greater at all times when the spent acid storage tanks are being vented to it. The Compliance Response Plan for this unit shall contain troubleshooting, contingency and response steps for when the pH is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit. The instrument used for determining the pH shall be calibrated at least once per calendar month.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.6 Record Keeping Requirements

(a) To document compliance with Condition D.5.2**,** the Permittee shall record (on a yearly basis) the total number of hours the spent acid storage tanks, tank trucks and railcars were vented to the caustic scrubber.

(b) To document compliance with Condition D.5.6, the Permittee shall record the pH of the effluent liquor from the packed-column scrubber on a minutely basis.

(c) To document compliance with Condition D.5.5, the Permittee shall keep records showing the dates on which the pH instrument was calibrated.

D.5.7 Reporting Requirements

The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the number of hours that the spent acid storage tanks were vented to the caustic scrubber during the preceding year.

SECTION D.6 FACILITY OPERATION CONDITIONS

Hazardous Waste Storage Tanks (#s 72, 73, 74, 75)

Facility Description [326 IAC 2-7-5(15)]: Four (4) hazardous waste storage tanks with a capacity of 8,000 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare, should the furnace not be in operation. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. Hazardous waste tank trucks (except sulfur monochloride trucks covered under Section D.8) utilize the same control equipment during unloading activities and will be considered part of this emission unit. Some atmospheric venting of tank trucks occurs (during open-dome sampling, for example). The company considers these to be insignificant activities. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 There are no specific emissions limitations applicable to this facility.

D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.6.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.6.4 Control of Hazardous Air Pollutants (HAPs) [326 IAC 20-23-1]

Pursuant to 40CFR Part 63, Subpart DD (National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations) and 326 IAC 20-23-1, air emissions from the hazardous waste storage tanks shall be controlled in the following manner:

(a) The tanks shall be covered by a fixed roof and vented directly through a closed-vent system to a control device.

(b) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(c) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. The closure device shall be designed to operate with no detectable organic emissions as determined by the procedure in 40 CFR 63.694(k). Pursuant to 40CFR Part 61, Subpart FF, each opening shall be inspected at least once per year.

(d) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life.

(e) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(1) When access into the tank is needed to perform routine maintenance, inspections or other activities needed for normal operations.

(2) To remove accumulated sludge or other residues.

(3) Opening of a safety device is allowed at any time conditions require it to do so to avoid an unsafe condition.

(4) Following the completion of the activities listed in e) 1-3 above, the owner or operator shall promptly secure the closure device in the closed position.

(f) The vent stream required to be controlled shall be conveyed to the control device by a closed-vent system designed and operated with no detectable organic emissions using the procedure specified in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, the closed vent system shall be inspected at least once per year.

(g) The control device used to control emissions from the hazardous waste storage tanks shall be one of the following:

(1) An industrial furnace which complies with the requirements of 40 CFR Part 266 Subpart H. Whenever the furnace is being utilized to control air emissions from the hazardous waste storage tanks, the furnace oxygen level, temperature and combustion gas velocity shall meet the minimum and maximum requirements established in the most recent compliance test.

(2) A flare designed and operated in accordance with the requirements of 40 CFR 63.11(b). To meet the monitoring requirements, the owner or operator shall use a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(3) Pursuant to 40 CFR Part 61, Subpart FF, the data on the furnace oxygen level, temperature, and combustion gas velocity as well as the status of the flare's pilot flame shall be inspected by the Permittee on a daily basis.

(h) The Permittee shall control the HAP emitted from equipment leaks (for the components meeting all the criteria listed in (1) - (3) below) in accordance with the applicable provisions of sections 63.162 through 63.182 in 40 CFR Part 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks.

(1) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight;

(2) The equipment piece is a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system; and

(3) The equipment piece is intended to operate 300 hours or more during a 12-month period.

(i) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, air emissions from all tank trucks containing an off-site material (as defined in 40 CFR 63.681) shall be controlled in

accordance with the standards for Container Level 2 controls as specified in 40 CFR Part 63, Subpart PP, National Emission Standards for Containers.

(j) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, air emissions from liquid or solid off-site material transfer systems (i.e. pipes, hoses) shall be controlled by the use of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(k) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, air emissions from liquid or solid off-site material transfer systems that are also individual drain systems shall be controlled in accordance with the standards specified in 40 CFR Part 63, Subpart RR, National Emission Standards for Individual Drain Systems.

(l) Pursuant to 40 CFR Part 61, Subpart FF, each fixed-roof, seal, access door, and all other openings in the tank shall be checked by visual inspection quarterly to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly. Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

(m) Pursuant to 40 CFR Part 61, Subpart FF, each closed-vent system and control device shall be visually inspected quarterly. The visual inspection shall include inspection of the ductwork, piping, and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections. Except as provided in 40 CFR 61.350, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.6 Record Keeping Requirements [326 IAC 20-23-1] [326 IAC 12-1-1]

(a) The Permittee shall record the number of hours that the hazardous waste storage tanks are vented to the flare each calendar year.

(b) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, the Permittee shall record the following:

(1) The date of occurrence and the duration of each malfunction of the vent system or air pollution control equipment. The duration during which gases were vented to a malfunctioning control device. The actions taken to restore proper operation of the control equipment.

(2) The date and time when either start-up or shutdown of the control equipment occurred.

(3) All the information necessary to demonstrate conformance with the company's start-up, shutdown and malfunction plan.

(4) Records of all calibrations or calibration checks of the continuous monitoring systems for the control devices.

(5) On a semiannual basis the Permittee shall record the planned maintenance activities, their frequency and expected duration (for the following six months) that would require the control equipment not to meet the required operating conditions. Also, the company shall record the type of maintenance activities performed during the preceding six months along with the total number of hours when the control equipment was not operated in accordance with the required operating conditions.

(6) The furnace oxygen level, temperature and combustion gas velocity shall be recorded on a continuous basis.

(7) The status of the pilot flame for the flare shall be recorded on a continuous basis. Pursuant to 40 CFR Part 61, Subpart FF, the recorded data shall be inspected on a daily basis to ensure the control device is operating properly.

(c) Pursuant to 40 CFR Part 60, Subpart Kb and 326 IAC 12-1-1, the Permittee shall keep readily accessible records showing the dimension of the hazardous waste storage tanks and an analysis showing the capacity of the hazardous waste storage tanks.

(d) Pursuant to 40 CFR Part 61, Subpart FF, the Permitee shall keep readily accessible records showing the following:

(1) Identifying each waste stream subject to 40 CFR Part 61, Subpart FF and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart.

(2) For each waste stream not controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(3) Engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment.

(4) A statement signed and dated by the owner or operator certifying that the treatment unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(5) A statement signed and dated by the owner or operator certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

(6) For the flare, records of the design analysis including specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or

operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following: the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 40 CFR 60.18.

(7) Results of all visual and instrument-based inspections required under sections D.6.4 (c), (f), (k), (l) including the date of inspection, equipment inspected, observation or instrument reading, VOC background concentration, location of any problems, and description of the problem. Also included in the records should be the description and dates of any attempts at corrective action and the date when the corrective action was completed.

D.6.7 Reporting Requirements [326 IAC 20-23-1]

(a) The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the number of hours that the hazardous waste storage tanks were vented to the flare during the preceding year.

(b) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, the Permittee shall submit the following reports to HDEM:

(1) Results of all performance tests conducted on the control equipment.

(2) By the 30th day following the end of each calendar half, the company shall submit a report containing the date and time of each start-up, shutdown or malfunction which took place during the preceding six months. The report shall include the name, title and signature of a responsible official who certifies that the actions taken by the company during the start-up, shutdown or malfunction are consistent with the company's plan.

(3) Within two working days after commencing actions inconsistent with the company's start-up, shutdown and malfunction plan the company shall report such actions to HDEM either by telephone or facsimile and follow this report with a letter postmarked no later than seven working days after the end of the event. The letter shall explain the circumstances of the event, the reasons for not following the plan, whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. The letter shall include the name, title and signature of a responsible official who is certifying the accuracy of the report.

(4) Pursuant to 40CFR Part 61, Subpart FF, quarterly reports listing: all periods recorded in which the flare's pilot flame was absent, any three (3) hour period in which the furnace parameters established in section D.6.4(g)(1) were outside the range of acceptable values or furnace was not operating as designed shall be furnished to HDEM.

(c) Pursuant to 40 CFR Part 61, Subpart FF, the Permittee shall submit the following reports to HDEM:

(1) An annual report updating the information originally submitted as per 40 CFR 61.357 (a)(1) through (a)(3). Also included should be a summary of all inspections required under sections D.6.4 (c), (f), (k), and (l) of this permit during which detectable emissions were measured or a problem that could result in benzene emissions was identified, including information about the repairs or corrective action taken.

(2) A quarterly certification that all the inspections required under sections D.6.4 (c), (f), (k), and (l) of this permit have been carried out in accordance with 40 CFR Part 61, Subpart FF.

SECTION D.7 FACILITY OPERATION CONDITIONS

Hazardous Waste Blend Tanks (#s 70, 71)

Facility Description [326 IAC 2-7-5(15)]: Two (2) hazardous waste blend tanks with a capacity of 56,400 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare, should the furnace not be in operation. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. These tanks have been separated from the other hazardous waste tanks because they are covered by NSPS. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 There are no specific emissions limitations applicable to this facility.

D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.7.4 Control of Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs) [326 IAC 20-23-1]

Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations (except as otherwise indicated), air emissions from the hazardous waste blend tanks shall be controlled in the following manner:

(a) The tanks shall be covered by a fixed roof and vented directly through a closed-vent system to a control device.

(b) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(c) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. The closure device shall be designed to operate with no detectable organic emissions as determined by the procedure in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, each opening shall be inspected at least once per year.

(d) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life.

(e) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(1) When access into the tank is needed to perform routine maintenance, inspections or other activities needed for normal operations.

(2) To remove accumulated sludge or other residues.

(3) Opening of a safety device is allowed at any time conditions require it to do so to avoid an unsafe condition.

(4) Following the completion of the activities listed in e) 1-3 above, the owner or operator shall promptly secure the closure device in the closed position.

(f) The vent stream required to be controlled shall be conveyed to the control device by a closed-vent system designed and operated with no detectable organic emissions using the procedure specified in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, the closed vent system shall be inspected at least once per year.

(g) The control device used to control emissions from the hazardous waste storage tanks shall be one of the following:

(1) An industrial furnace which complies with the requirements of 40 CFR Part 266 Subpart H. Whenever the furnace is being utilized to control air emissions from the hazardous waste storage tanks, the furnace oxygen level, temperature and combustion gas velocity shall meet the minimum and maximum requirements established in the most recent compliance test.

(2) A flare designed and operated in accordance with the requirements of 40 CFR 63.11(b). To meet the monitoring requirements, the owner or operator shall use a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(3) Pursuant to 40 CFR Part 61, Subpart FF, the data on the furnace oxygen level, temperature, and combustion gas velocity as well as the status of the flare's pilot flame shall be inspected by the Permittee on a daily basis.

(h) Pursuant to 40 CFR Part 60, Subpart Kb and 326 IAC 12-1-1, the control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device. It shall meet the specifications described in the general control device requirements (60.18) of the General Provisions.

(i) Pursuant to 40 CFR Part 60, Subpart Kb and 326 IAC 12-1-1, The Permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the administrator in accordance with 40 CFR 60.113b, paragraph (c)(1), unless the plan was modified by the administrator during the review process. In this case, the modified plan applies.

(j) The Permittee shall control the HAP emitted from equipment leaks (for the components meeting all the criteria listed in (1) - (3) below) in accordance with the applicable provisions of sections 63.162 through 63.182 in 40 CFR Part 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks.

(1) The equipment component contains or contacts off-site material having a total HAP concentration equal to or greater than 10 percent by weight;

(2) The equipment piece is a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system; and

(3) The equipment piece is intended to operate 300 hours or more during a 12-month period.

(k) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, air emissions from all tank trucks containing an off-site material (as defined in 40CFR 63.681) shall be controlled in accordance with the standards for Container Level 2 controls as specified in 40 CFR Part 63, Subpart PP, National Emission Standards for Containers.

(l) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, air emissions from liquid or solid off-site material transfer systems (i.e. pipes, hoses) shall be controlled by the use of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(m) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, air emissions from liquid or solid off-site material transfer systems that are also individual drain systems shall be controlled in accordance with the standards specified in 40 CFR Part 63, Subpart RR, National Emission Standards for Individual Drain Systems.

(n) Pursuant to 40 CFR Part 61, Subpart FF, each fixed-roof, seal, access door, and all other openings in the tank shall be checked by visual inspection quarterly to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly. Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

(o) Pursuant to 40 CFR Part 61, Subpart FF, each closed-vent system and control device shall be visually inspected quarterly. The visual inspection shall include inspection of the ductwork, piping, and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections. Except as provided in 40 CFR 61.350, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.5 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.6 Record Keeping Requirements [326 IAC 20-23-1] [326 IAC 12-1-1]

(a) The Permittee shall record the number of hours that the hazardous waste blend tanks are vented to the flare each calendar year.

(b) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, the Permittee shall record the following:

(1) The date of occurrence and the duration of each malfunction of the vent system or air pollution control equipment. The duration during which gases were vented to a malfunctioning control device. The actions taken to restore proper operation of the control equipment.

(2) The date and time when either start-up or shutdown of the control equipment occurred.

(3) All the information necessary to demonstrate conformance with the company's start-up, shutdown and malfunction plan.

(4) Records of all calibrations or calibration checks of the continuous monitoring systems for the control devices.

(5) On a semiannual basis the Permittee shall record the planned maintenance activities, their frequency and expected duration (for the following six months) that would require the control equipment not to meet the required operating conditions. Also, the company shall record the type of maintenance activities performed during the preceding six months along with the total number of hours when the control equipment was not operated in accordance with the required operating conditions.

(6) The furnace oxygen level, temperature and combustion gas velocity shall be recorded on a continuous basis.

(7) The status of the pilot flame for the flare shall be recorded on a continuous basis. Pursuant to 40CFR Part 61, Subpart FF, the recorded data shall be inspected on a daily basis to ensure the control device is operating properly.

(c) Pursuant to 40 CFR Part 60, Subpart Kb and 326 IAC 12-1-1, the Permitee shall keep readily accessible records showing the following:

(1) dimensions of the hazardous waste storage tanks and an analysis showing the capacity of the hazardous waste storage tanks,

(2) a copy of the operating plan for the control device(s).

(3) a record of the measured values of the parameters monitored in accordance with the operating plan required under 60.113b(c)(1).

(d) Pursuant to 40 CFR Part 61, Subpart FF, the Permitee shall keep readily accessible records showing the following:

(1) Identifying each waste stream subject to 40 CFR Part 61, Subpart FF and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart.

(2) For each waste stream not controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of

benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(3) Engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment.

(4) A statement signed and dated by the owner or operator certifying that the treatment unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(5) A statement signed and dated by the owner or operator certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

(6) For the flare, records of the design analysis including specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following: the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 40 CFR 60.18.

(7) Results of all visual and instrument-based inspections required under sections D.7.4 (c), (f), (k), (l), including the date of inspection, equipment inspected, observation or instrument reading, VOC background concentration, location of any problems, and description of the problem. Also included in the records should be the description and dates of any attempts at corrective action and the date when the corrective action was completed.

D.7.7 Reporting Requirements [326 IAC 20-23-1]

(a) The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the number of hours that the hazardous waste storage tanks were vented to the flare during the preceding year.

(b) Pursuant to 40 CFR Part 63, Subpart DD and 326 IAC 20-23-1, the Permittee shall submit the following reports to HDEM:

(1) Results of all performance tests conducted on the control equipment.

(2) By the 30th day following the end of each calendar half, the company shall submit a report containing the date and time of each start-up, shutdown or malfunction which took place during the preceding six months. The report shall include the name, title and signature of a responsible official who certifies that the actions taken by the company during the start-up, shutdown or malfunction are consistent with the company's plan.

(3) Within two working days after commencing actions inconsistent with the company's start-up, shutdown and malfunction plan the company shall report such actions to HDEM either by telephone or facsimile and follow this report with a letter postmarked no later than seven working days after the end of the event. The letter shall explain the circumstances of the event, the reasons for not following the plan, whether any

excess emissions and/or parameter monitoring exceedances are believed to have occurred. The letter shall include the name, title and signature of a responsible official who is certifying the accuracy of the report.

(4) Pursuant to 40 CFR Part 61, Subpart FF, quarterly reports listing: all periods recorded in which the flare's pilot flame was absent, any three (3) hour period in which the furnace parameters established in section D.6.4(g)(1) were outside the range of acceptable values or furnace was not operating as designed shall be furnished to HDEM.

(c) Pursuant to 40 CFR Part 61, Subpart FF, the Permittee shall submit the following reports to HDEM:

(1) An annual report updating the information originally submitted as per 40 CFR 61.357 (a)(1) through (a)(3). Also included should be a summary of all inspections required under sections D.7.4 (c), (f), (k), and (l) of this permit during which detectable emissions were measured or a problem that could result in benzene emissions was identified, including information about the repairs or corrective action taken.

(2) A quarterly certification that all the inspections required under sections D.7.4 (c), (f), (k), and (l) of this permit have been carried out in accordance with 40 CFR Part 61, Subpart FF.

SECTION D.8 FACILITY OPERATION CONDITIONS

Sulfur Monochloride Truck Unloading

Facility Description [326 IAC 2-7-5(15)]: One sulfur monochloride truck unloading station with a maximum unloading rate of 50 pounds per minute. HAPs released when sampling, breaking connections, or venting down sulfur monochloride containing trucks (when Unit 4 is not in operation) are controlled by a carbon adsorption system (CAS) which exhausts through a stack identified as D061. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Volatile Organic Compounds (VOCs) [Hammond Ordinance No. 3522, Section 4.1]

Pursuant to Hammond Ordinance No. 3522, Section 4.1, the VOC emission rate from the sulfur monochloride truck unloading station shall not exceed 0.426 pounds per hour or 1.866 tons per year.

D.8.2 Hazardous Air Pollutants (HAPs) [Hammond Ordinance No. 3522, Section 4.1]

Pursuant to Hammond Ordinance No. 3522, Section 4.1, the HAP emission rate from the sulfur monochloride truck unloading station shall not exceed 0.546 pounds per hour or 2.392 tons per year.

D.8.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.8.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or HDEM, compliance with the VOC and HAP emission limits specified in Conditions D.8.1 and D.8.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.8.5 Control of Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs)

The Permittee shall vent all sulfur monochloride tank trucks to the CAS or their industrial furnace. No direct atmospheric venting of sulfur monochloride tank trucks shall be performed.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.6 The Permittee shall test the carbon contained in each of the carbon drums, in accordance with ASTM Method D3467-94, on an annual basis to determine the carbon's life remaining percentage. Should the carbon's life remaining percentage be less than thirty percent (30%), the Permittee shall replace the carbon drum within three (3) weeks.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.7 Record Keeping Requirements

(a) To document compliance with Condition D.8.6**,** the Permittee shall maintain records indicating the dates when the carbon in the CAS was tested or replaced.

(b) The Permittee shall record the number of hours that the CAS was in use on an annual basis.

(c) The weight of each shipment of sulfur monochloride received at the facility shall be recorded.

D.8.8 Reporting Requirements

The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of sulfur monochloride received in the preceding year. The quantity of sulfur monochloride shall be given in units of tons per year.

SECTION D.9 FACILITY OPERATION CONDITIONS - INSIGNIFICANT ACTIVITIES

Molten Sulfur Storage Tank

Facility Description [326 IAC 2-7-5(15)]: One molten sulfur storage tank (tank 21R) with a capacity of 80,000 gallons. The tank exhausts to the atmosphere through a stack identified as D081. Molten sulfur tank truck unloading will be considered part of this facility. (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 There are no specific emission limitations applicable to this facility.

Compliance Determination Requirements

D.9.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.9.3 Nuisance Odor Prevention

The Permittee shall take all steps necessary, including the cessation of sulfur tank truck unloading, to maintain compliance with the nuisance provision of Hammond Ordinance No. 3522.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.4 There are no specific compliance monitoring requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.5 Record Keeping Requirements

Pursuant to Operation Permit #01706, the weight of each shipment of molten sulfur received at the facility shall be recorded.

D.9.6 Reporting Requirements

Pursuant to Operation Permit #01706, the Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of molten sulfur received in the preceding year. The quantity of molten sulfur shall be given in units of tons per year.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and
Hammond Department of Environmental Management

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Rhodia, Inc.
Source Address: 2000 Michigan Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-7258-00242

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

Annual Compliance Certification Letter

Test Result (specify)

Report (specify)

Notification (specify)

Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
5925 Calumet Avenue
Hammond, Indiana 46320
Phone: 219-853-6306
Fax: 219-853-6343

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Rhodia, Inc.
Source Address: 2000 Michigan Street, Hammond, Indiana 46320
Mailing Address: (same)
Part 70 Permit No.: T089-7258-00242

This form consists of 2 pages **Page 1 of 2**

_ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7- 16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started: Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other: Estimated amount of pollutant(s) emitted during emergency/deviation: Describe the steps taken to mitigate the problem: Describe the corrective actions/response steps taken: Describe the measures taken to minimize emissions: If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:
Title/Position:
Date:
Phone:

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Rhodia, Inc.
Source Address: 2000 Michigan Street, Hammond, Indiana 46320
Mailing Address: same
Part 70 Permit No.: T089-7258-00242

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Report period
Beginning: _____
Ending: _____

Boiler Affected		Alternate Fuel	Days burning alternate fuel
From	To		

(can omit boiler affected if only one gas boiler at this plant)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AIR POLLUTION CONTROL DIVISION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Rhodia, Inc.
Source Address: 2000 Michigan Street, Hammond, IN 46320
Mailing Address: same
Part 70 Permit No.: T089-7258-00242

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
__NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
__THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD
Permit Requirement (specify permit condition #)
Date of Deviation: **Duration of Deviation:**
Number of Deviations:
Probable Cause of Deviation:
Response Steps Taken:
Permit Requirement (specify permit condition #)
Date of Deviation: **Duration of Deviation:**
Number of Deviations:
Probable Cause of Deviation:
Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By:
Title/Position:
Date:
Phone:

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

and

Hammond Department of Environmental Management

Addendum to the
Technical Support Document for a Part 70 Operating Permit

Source Name:	**Rhodia Inc.**
Source Location:	2000 Michigan St., Hammond, Indiana 46320
County:	Lake
SIC Code:	2819
Operation Permit No.:	T089-7258-00242
Permit Reviewer:	Thomas J. Nyhan, HDEM

On August 28, 2000, the Hammond Department of Environmental Management (HDEM) had a notice published in the Hammond Times, Hammond, Indiana, stating that Rhodia, Inc. had applied for a Part 70 Operating Permit to operate a Sulfuric Acid Regeneration Unit. The notice also stated that HDEM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 25, 2000, comments were received from Pallavi Reddy of the U.S. EPA. No changes were made to the permit as a result of the EPA's comments. The following is a list of the EPA's comments and HDEM's responses to those comments.

1. Comment:
On page 12 of the TSD, the fugitive dust emissions limitations the source is subject to. What will keep the dust in check (c), what is the frequency of the VE check?

HDEM's Response
The fugitive dust or particulate requirements are included on page 12 of the TSD and page 25 of the permit because they are rules which apply to the Rhodia facility. Rhodia does not, however, have storage piles or other sources which could be persistent sources of fugitive particulate and would necessitate regular monitoring. There are no dust suppression requirements or periodic VE checks in the permit because there are no sources within the Rhodia facility which require such measures.

Rhodia has been found in violation of the fugitive particulate rules in the past. These violations were associated primarily with malfunction or emergency conditions (at various locations within the facility). The Emergency Provisions located on page 15 of the permit contain reporting and minimization of emissions requirements. These requirements would force the company to take all reasonable steps to suppress or control fugitive particulate emissions during malfunctions.

2. Comment:
Where does the permit reference the MACT subpart EEE?

HDEM's Response
It is HDEM's understanding that the MACT standard for hazardous waste combustors (40 CFR

63, Subpart EEE) only applies to certain types of hazardous waste combustors. These combustors include: incinerators burning hazardous waste, cement kilns, and lightweight aggregate kilns. The HDEM believes sulfuric acid recovery furnaces (SARFs) burning hazardous waste (such as the furnace in Rhodia's Unit 4) are not addressed under the current MACT standard. On June 27th of this year, the EPA issued a "Notice of data availability for future Phase II combustion rulemaking." From the information contained in this notice it is apparent that the MACT standard for SARFs such as Rhodia's will be developed as part of this Phase II combustion rulemaking.

In summary, the proposed Part 70 Operating Permit for Rhodia contains no reference to the hazardous waste combustor MACT standard because it is not believed to be applicable to Rhodia's SARF. When the Phase II combustion rulemaking develops a standard for SARFs, Rhodia's permit will be reopened and the standard will be included.

3. Comment:
On page 10 of 24 of the TSD, part (c) mentions that Rhodia's hazardous waste storage tanks 70-75 are exempted from monitoring requirements of part 60.116b(c). This part references part 60.112(b), but I could not find where monitoring of the closed vent and device were mentioned.

HDEM's Response
Monitoring for fugitive emissions and visible checks are included in conditions D.6.4(f) and D.6.4(m) for tank #s 72-75, and conditions D.7.4(f) and D.7.4(o) for tank #s 70-71. There are also requirements in D.4.7. Monitoring of operating parameters is included in D.4.3(a), D.6.4(g), and D.7.4(g).

Note: The EPA was satisfied with HDEM's response to their comments and concurred that the current MACT standard for hazardous waste combustors does not apply to Rhodia.

Subsequent to the public comment period for this permit, IDEM - OAQ made changes to the model permit (dated 8/3/00). These changes were detailed in a memo dated 10/20/00. This Part 70 Operating Permit (OP No. T089-7258-00242) was modified to make it consistent with the 10/20/00 model. The changes are as follows (bolded language has been added, the language with a line through it has been deleted):

Front Page

1. The expiration has been added to the signature box. The redundant "Issuance Date" and pemrit number have been removed.

Operation Permit No.: T089-7258-00242	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: **Expiration Date:**

~~Operation Permit No.: T089-7258-00242~~	
Issued by: Ronald L. Novak, Director Hammond Department of Environmental Management	~~Issuance Date:~~

Section A

2. A.1 (General Information) the following rule cite has been added, IAC 2-7. The telephone number has been removed.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] **[326 IAC 2-7-1(22)]**

The Permittee owns and operates a stationary sulfuric acid regeneration unit which utilizes hazardous waste as a fuel.

Responsible Official:	Bill Colvin, Plant Manager
Source Address:	2000 Michigan Street Hammond, Indiana 46320
Mailing Address:	Same
~~Phone Number:~~	~~(219) 853-7120~~
SIC Code:	2819
County Location:	Lake
County Status:	Nonattainment for TSP, PM_{10}, SO_2, NO_2, O_3, VOC Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

3. A.2 (now A.3) (Emission Units and Pollution Control Equipment Summary) the dates of construction were added to the facility descriptions.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Package Boiler: One (1) natural gas fired boiler, **constructed in 1980**, rated at ninety-four point three (94.3) MMBtu per hour, exhausting at one (1) stack, identified as D011. The package boiler is used to provide supplemental plant steam when Unit #4 is not in operation or is unable to meet the demand.

(b) Unit 4 Preheater: One (1) natural gas fired furnace, **constructed in April of 1962**, rated at thirty-four (34) MMBtu per hour, exhausting at one (1) stack, identified as D021. The Unit 4 Preheater is used to heat-up the back half of the sulfuric acid regeneration unit following a prolonged shutdown.

(c) John Zink Furnace: One (1) natural gas fired furnace, **constructed in October of 1981**, rated at fifty-one (51) MMBtu per hour, exhausting at one (1) stack, identified as D031. The John Zink Furnace is used to heat-up the front half of the sulfuric acid regeneration unit following a prolonged shutdown.

(d) Sulfuric Acid Regeneration Unit (Unit 4): Unit 4 **was constructed in 1958** and has a maximum acid production rate of 45.83 tons per hour. Raw materials fed to the unit include molten sulfur, spent sulfuric acid, and other sulfur-bearing materials. The unit includes one (1) industrial furnace firing natural gas, RCRA hazardous wastes and non-hazardous materials. The industrial furnace is rated at two hundred sixty (260) MMBtu per hour. Acid mist emissions from Unit 4 are controlled by a Brink's mist eliminator before exhausting

through one (1) stack, identified as D031. Sulfur dioxide emissions are controlled in the process by a double absorption system.

(e) Spent Sulfuric Acid Storage Tanks (#s 46, 47, 56, 57, 58): Five (5) spent sulfuric acid storage tanks, **constructed in 1958, 1987, 1979, 1979, and 1979, respectively**. The tanks have a total capacity of 2,650,000 gallons. Emissions from these tanks are controlled by the Unit 4 furnace or the caustic scrubber. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D051 when venting to the caustic scrubber. The furnace controls both sulfur dioxide and VOC emissions. The caustic scrubber only controls sulfur dioxide emissions, therefore, operating hour restrictions are placed on the time the spent acid storage tanks can be vented to the scrubber. Spent sulfuric acid tank trucks and railcars utilize the same control equipment during unloading activities and will be considered part of this emission unit.

(f) Hazardous Waste Storage Tanks (#s 72, 73, 74, 75): Four (4) hazardous waste storage tanks, **constructed in October of 1985**, with a capacity of 8,000 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. Hazardous waste tank trucks (except sulfur monochloride trucks covered under Section D.8) utilize the same control equipment during unloading activities and will be considered part of this emission unit. Some atmospheric venting of tank trucks occurs (during open-dome sampling, for example). The company considers these to be insignificant activities.

(g) Hazardous Waste Blend Tanks (#s 70, 71): Two (2) hazardous waste blend tanks, **constructed in 1986 and 1985, respectively**. The tanks have a capacity of 56,400 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. These tanks have been separated from the other hazardous waste tanks because they are covered by NSPS.

(h) Sulfur Monochloride Truck Unloading Station: One sulfur monochloride truck unloading station, **constructed in 1995**, with a maximum unloading rate of 50 tons per hour. HAPs released when sampling, breaking connections, or venting down sulfur monochloride containing trucks (when Unit 4 is not in operation) are controlled by a carbon adsorption system (CAS) which exhausts through a stack identified as D061.

(i) Molten Sulfur Storage Tank: One molten sulfur storage tank (tank 21R), **constructed in June of 1997**, with a capacity of 80,000 gallons. The tank exhausts to the atmosphere through a stack identified as D081. Molten sulfur tank truck unloading will be considered part of this facility.

4. A.4 (Part 70 Applicability) was reorganized and (b) was added.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

~~(c)~~**(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).**

Section B

5. B.1 (Permit No Defense) has been deleted. This is not in IC13, but we do have the general authority for this in 326 IAC 2-7-15. Therefore, most of this language has been added to B.14 (Permit Shield). B.14 provides for when the possession of a permit does provide a defense and provides that it is only for those requirements in existence at the time of permit issuance. All other B conditions have been re-numbered as a result of this change.

~~B.1 Permit No Defense [IC 13]~~

~~(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.~~

~~(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield.~~

6. B.3 (Permit Term, now B.2) language has been added to clarify that amendments, revisions or modifications do not extend the expiration date of the permit. The expiration date will always be 5 years from the issuance date of the original permit. The expiration date will now be typed in the signature box as well.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the ~~effective~~ **original** date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. **Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.**

7. B.8 (Duty to Supplement and Provide Information, now B.7) The condition has been reworded to match the language in the rule.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAQ, and HDEM within a reasonable time, any information that IDEM, OAQ, and HDEM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).). **Upon request, the Permittee shall also furnish to IDEM, OAQ, and HDEM copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]**

(c) ~~Upon request, the Permittee shall also furnish to IDEM, OAQ,~~ ***~~(and local agency when applicable)~~*** ~~copies of records required to be kept by this permit.~~ The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. ~~If requested by IDEM, OAQ, or the U.S. EPA, to~~ When furnishing copies of requested records directly to U. S. EPA, ~~then the Permittee must furnish record directly to the U. S. EPA.~~ The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

8. B.9 (Compliance with Permit Conditions, now B.8) (c) has been added to clarify that an emergency does constitute a defense in an enforcement action if the Permittee complies with the emergency procedures.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permitee complies with the applicable requirements set forth in condition B, Emergency Provisions.

9. B.10 (Certification, now B.9) (b) has been modified to clarify when a certification is needed.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal **requiring certification**.

10. B.11 (Annual Compliance Certification, now B.10) paragraph (a) has been revised to clarify that the initial certification is from the date of issuance until Dec. 31. Paragraph (c) has been revised so that it matches the language in the rule.

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices~~. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:~~ **The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:**

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and HDEM on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and HDEM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

11. B.12 (Preventive Maintenance Plan, now B.11) the record keeping requirements have been added to this condition.

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMP’s shall be submitted to IDEM, OAQ, and HDEM upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and HDEM. IDEM, OAQ, and HDEM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3)

years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

12. B.13 (Emergency Provisions, now B.12) a reference to the Emergency Occurrence Report Form has been added to B.13(b)(5). The emergency form is for emergencies only , and is no longer an emergency and deviation form. All deviations will now be reported on the Quarterly Deviation and Compliance Monitoring Report. Paragraph (d) part of the first sentence has been deleted. Since we know it is a TV source, then we also know the malfunction rule has been superceded by the emergency rule. Paragraph (f) "compliance" has been changed to "accordance".

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and HDEM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Mgt., Compliance Section)
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Telephone Number: 219-853-6306 (HDEM)
Facsimile Number: 219-853-6343 (HDEM)

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent ~~notice~~, either ~~in writing~~ by mail or facsimile~~, of the emergency~~ to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) ~~for sources subject to this rule after the effective date of this rule.~~ This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, and HDEM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, and HDEM by telephone or facsimile of an emergency lasting more than one (1) hour in ~~compliance~~ **accordance** with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

13. B.14 (Permit Shield, now B.13) some of the language from B.1 has been added to it. B.14(d) some of the language has been removed because it is unnecessary and would be contradictory to our revising operating permits. Construction permit terms are covered in the definition of applicable requirements.

B.14 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. **The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.**

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.

(c) ~~The IDEM, OAQ has determined that the following requirements are not applicable to this source:~~ **In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:**

(1) 40 CFR Part 60, subparts K, Ka and Kb do not apply to the spent acid storage tanks #s 46, 47, 56, 57, and 58. Tank 46 was constructed prior to the applicability dates. Tank 47 is exempt because the true vapor pressure of the contents is less than 3.5 kPa. Tanks #s 56, 57, and 58 meet the applicability section of subpart Ka but are not subject to any of the standards, testing or monitoring requirements of the subpart because the true vapor pressure of the contents is below 10.3 kPa. This essentially exempts tanks #s 56, 57 and 58 from subpart Ka's requirements. Also, 326 IAC 8-9 does not apply to tanks #s 46, 47, 56, 57, and 58 because the maximum true vapor pressure is below 0.5 psia.

(2) 40 CFR Part 63, Subpart Q, National Emissions Standard for Hazardous Air Pollutants for Industrial Process Cooling Towers does not apply to the Rhodia facility on the basis that the source's cooling towers do not operate with chromium-based water treatment chemicals.

(3) 326 IAC Article 19 Mobile Source Rules, and the CAA Title I Sec 182(d)(1)(B), related to employee trip reduction do not apply to the Rhodia facility on the basis

that fewer than 100 person are employed at the facility.

(4) NSPS Subpart H does not apply to the source's sulfuric acid regeneration Unit 4 since the unit was installed prior to the applicability date and has not been modified or reconstructed since the applicability date.

(d) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, ~~including any term or condition from a previously issued construction or operation permit,~~ IDEM, OAQ, or HDEM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(e) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(f) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(g) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(h) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, and HDEM has issued the modifications. [326 IAC 2-7-12(c)(7)]

(i) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, and HDEM has issued the modification. [326 IAC 2-7-12(b)(7)]

14. B.16 (Deviations from Permit Requirements and Conditions, now B.15) we are no longer requiring sources to report deviations in 10 days. Now they will report deviations quarterly on the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report have been removed since deviations will not be reported on that form anymore. There is no longer a 5% exception for reporting deviations, since we relaxed the 10 day notification to a quarterly report.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency

Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance ~~Branch~~ Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

~~within ten (10) calendar days from the date of the discovery of the deviation~~ using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~except for the failure to perform the monitoring or record the information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.~~ Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

~~(2) An emergency as defined in 326 IAC 2-7-1(12); or~~

~~(3)~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

~~(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.~~

15. B.17 (Permit Modification, Reopening, Revocation and Reissuance, or Termination, now B.16) the "and" has been changed to "or" since the reopening could be done by either the local or the state agency.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, ~~**and**~~ **or HDEM** at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, ~~**and**~~ **or HDEM** may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

16. B.19 (Permit Amendment or Modification, now B.18) 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official, therefore this condition has been revised to clarify that. EPA has also requested this change.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) ~~The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.~~ **Permit amendments and modifications are governed by the requirements of 326 IAC 2- 7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.**

(b) Any application requesting an amendment or modification of this permit shall be submitted to:
Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) ~~only if a certification is required by the terms of the applicable rule~~.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

17. B.21 (Operational Flexibility, now B.20) (b) has been reorganized a bit. Paragraph (b)(1) was taken out so the condition would be consistent with the language in the rule.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). ~~and the following additional conditions:~~

~~(1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).~~

~~(2)~~ For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

~~(A)~~(1) A brief description of the change within the source;

~~(B)~~(2) The date on which the change will occur;

~~(C)~~(3) Any change in emissions; and

~~(D)~~(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

18. B.22 (Source Modification Requirement, now B.21) 326 IAC 2 has been added to make the condition more complete. The language "applicable provisions" has been removed because it is unnecessary.

B.21 Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by ~~the applicable provisions of~~ **326 IAC 2 and** 326 IAC 2-7-10.5.

19. B.23 (Inspection and Entry, now B.22) "At reasonable times" has been deleted because neither the rule nor the statute limit us. We could ask for those things at any time.

B.22 Inspection and Entry [326 IAC 2-7-6~~(2)~~] **[IC 13-14-2-2]**

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, HDEM, and U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, ~~at reasonable times,~~ any records that must be kept under the conditions of this permit;

(c) Inspect, ~~at reasonable times,~~ any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, ~~at reasonable times,~~ substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

~~[326 IAC 2-7-6(6)]~~

20. B.24 (Transfer of Ownership or Operational Control, now B.23) 326 IAC 2-7-4(f) requires all applications to be certified by the responsible official, therefore this condition has been revised to clarify that. EPA has also requested this change.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

The application which shall be submitted by the Permittee does ~~not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

21. B.25 (Annual Fee Payment, now B.24) a rule cite was added to paragraph (a).

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, and HDEM within thirty (30) calendar days of receipt of a billing. **Pursuant 326 IAC 2- 7-19(b),** if the Permittee does not receive a bill from IDEM, OAQ or HDEM, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

Section C

22. C.6 (Fugitive Dust Emissions) has been deleted since it is not applicable to the Rhodia facility. The Rhodia facility does not have the potential to emit over 25 tons per year of fugitive dust and is not one of the sources listed in the rule.

~~C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1]~~

~~The Permittee shall be in violation of 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Mater Control Requirements), if the opacity of fugitive particulate emissions exceeds ten percent (10%).~~

23. C.7 (Operation of Equipment, now C.6) the following revisions were made to clarify the condition.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, **or in this permit**, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

24. C.8 (Stack Height, now C.7) language has been added to clarify which parts of 326 IAC 1-7 are not federally enforceable.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. **The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.**

25. C.9 (Asbestos Abatement Projects, now C.8) the rule cite in the title was changed to make it more generalized.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] ~~[40 CFR 61.140]~~ **[40 CFR 61, Subpart M]**

26. C.10 (Performance Testing, now C.9) “within” has been changed to “not later than”.

C.10 Performance Testing [326 IAC 3-6]

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and HDEM ~~within~~ **not later than** forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and HDEM, if the source submits to IDEM, OAQ, a reasonable written explanation ~~within~~ **not later than five** (5) days prior to the end of the initial forty-five (45) day period.

27. C.12 (Compliance Monitoring, now C.11) there are times when compliance monitoring is required by a MACT that the source does not have to comply with yet. Therefore, language has been added to clarify that the permit will specify when CM doesn’t have to start in 90 days. The same idea applies to new units, if the MACT doesn’t apply yet, we would not expect the source to start compliance monitoring.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

28. C.13 (Maintenance of Emission Monitoring Equipment, now C.12) the language has been tweaked to clarify the intent.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than **once every** two (2) hours until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

29. C.14 (Monitoring Methods, now C.13) the following rule cites have been added.

C.13 Monitoring Methods [326 IAC 3] **[40 CFR 60] [40 CFR 63]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, **40 CFR 60 Appendix B, 40 CFR 63**, or other approved methods as specified in this permit.

30. C.15 (Pressure Gauge Specifications, now C.14) rule cites have been added. Language has been added for other instrument specifications.

C.14 Pressure Gauge and Other Instrument Specifications **[326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ or HDEM approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

31. C.16 (Emergency Reduction Plans, now C.15) if the ERP is already submitted is doesn't make sense to say what needs to be in it. Therefore (c) and (d) have been deleted.

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on 12/13/96***)***.

(b) If the ERP is disapproved by IDEM, OAQ, and HDEM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

~~(c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.~~

~~(d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.~~

~~(e)~~(c) Upon direct notification by IDEM, OAQ, and HDEM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

32. C.17 (Risk Management Plan, now C.16) if a source is subject to 40 CFR 68, they should have already submitted a Risk Management Plan.

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68 ~~by the date provided in 40 CFR 68.10(a)~~; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(c) A verification to IDEM, OAQ, and HDEM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68 on 6/16/99.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

33. C.18 (Compliance Monitoring Plan - Failure to Take Response Steps, now C.17) little grammatical changes were made upon a few reviewers request. (a) "of" was added. (c) ";or" has been replaced with a period. (f) "(5%)" has been added to be consistent with the rest of the permit. Also, changes were made to (a)(5) and (f) due to frequently asked questions.

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. ~~This compliance monitoring plan is comprised of:~~ **The elements of the compliance monitoring plan are:**

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ and HDEM upon request and shall be subject to review and approval by IDEM, OAQ, and HDEM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps ~~shall~~ may constitute a violation of the permit.

(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.~~; or~~

(3) An automatic measurement was taken when the process was not operating.~~; or~~

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

(f) ~~If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.~~

~~(1)~~ At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides ~~such failure providing~~ adequate justification ~~is documented~~ and documents that such failures do not exceed five percent (5%) of the operating time in any quarter.

~~(2)~~ Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

34. C.19 (Actions Related to Noncompliance Demonstrated by a Stack Test, now C.18) "corrective actions" has been changed to "response actions" to be consistent with the rest of the permit.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate ~~corrective~~ **response** actions. The Permittee shall submit a description of these ~~corrective~~ **response** actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the ~~corrective~~ **response** actions are being implemented.

35. C.20 (Emission Statement, now C.19) "estimated" was added to (a)(1) and (a)(2) because that is how 326 IAC 2-6 describes emissions.

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate **estimated** actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate **estimated** actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

36. C.21 (General Record Keeping Requirements, now C.20) "monitoring" was removed so that the condition will seem more generalized to all record keeping, "reports" was added to clarify that the source must keep copies of those as well. (b) and (c) have been removed because they were unnecessary. If we wanted records of those things, we would specify it in D or elsewhere in the permit.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required ~~monitoring~~ data, **reports** and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or HDEM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or HDEM within a reasonable time.

~~(b) Records of required monitoring information shall include, where applicable:~~

~~(1) The date, place, and time of sampling or measurements;~~

~~(2) The dates analyses were performed;~~

~~(3) The company or entity performing the analyses;~~

~~(4) The analytic techniques or methods used;~~

~~(5) The results of such analyses; and~~

~~(6) The operating conditions existing at the time of sampling or measurement.~~

~~(c) Support information shall include, where applicable:~~

~~(1) Copies of all reports required by this permit;~~

~~1. All original strip chart recordings for continuous monitoring instrumentation;~~

~~(3) All calibration and maintenance records;~~

~~(4) Records of preventive maintenance.~~

~~(d)~~(b) **Unless otherwise specified in this permit**, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

37. C.22 (General Reporting Requirements, now C.21) the Semi-Annual Compliance Monitoring Report is now the Quarterly Deviation and Compliance Monitoring Report. References to the emergency report has been removed, all the information is in B.13. In (d) we have clarified that the report does need to be certified by the responsible official, this change is also reflected in all the D sections and the reporting forms. EPA has also requested this change.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) ~~To affirm that the source has met all the compliance monitoring requirements stated in this permit~~ The source shall submit ~~a~~ the attached Quarterly ***(or Semi-Annual - if the source isn't required to do any quarterly reporting)*** **Deviation and** Compliance Monitoring Report or its equivalent. Any deviation from ~~the~~ permit requirements, ~~and~~, the date(s) of each deviation, **the cause of the deviation, and the response steps taken** must be reported. **This report shall be submitted within thirty (30) days of the end of the reporting period.** The Quarterly **Deviation and** Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Hammond Department of Environmental Management
Air Pollution Control Division
5925 Calumet Ave., Room 304
Hammond, Indiana 46320

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and HDEM on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly, semiannual or annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report***s*** do ~~not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

~~(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.~~

~~(g)~~(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Section D

38. D.1.7 (Reporting Requirements) the reference to the superceded operating permit was removed.

D.1.7 Reporting Requirements

~~Pursuant to Operation Permit #01702~~, The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the package boiler during the preceding year. The quantity of natural gas shall be given in units of million cubic feet per year.

39. D.2.7 (Reporting Requirements) the reference to the superceded operating permit was removed.

D.2.7 Reporting Requirements

~~Pursuant to Operation Permit #01705~~, The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the Unit 4 Preheater during the preceding year. The quantity of natural gas shall be given in units of million cubic feet per year.

40. D.4.5 (Testing Requirements) the reference to the superceded operating permit was removed. The reference to a specific test method was replaced with a reference to "methods approved by the Commissioner".

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

~~Pursuant to Operation Permit #01703~~, the Permittee is required to perform an annual performance test on Unit 4 in order to demonstrate compliance with the acid mist and sulfur dioxide emission limits established in Conditions D.4.1 and D.4.2, respectively~~. Compliance with the SO_2 and acid mist emission limits specified n Conditions D.4.1 and D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing utilizing Method 8 (40 CFR Part 60, Appendix A).~~ **The tests shall be performed utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C-Performance Testing.**

41. D.4.9 (Parametric Monitoring) language was added referring to the Compliance Response Plan.

D.4.9 Parametric Monitoring

Pursuant to 40 CFR Part 61, Subpart FF, the pressure in the industrial furnace shall be monitored continuously to ensure that the pressure remains below atmospheric pressure. **The Compliance Response Plan for this unit shall contain troubleshooting, contingency and response steps for when the pressure reading greater than or equal to atmospheric pressure for any one reading. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit.**

42. D.4.12 (Reporting Requirements) the reference to the superceded operating permit was removed.

D.4.12 Reporting Requirements

(a) Pursuant to 326 IAC 7-4-1.1(c), the Permittee shall submit a report to IDEM, OAQ, and HDEM 30 days after the end of each calendar quarter. The report shall contain the following information:

(1) The daily average sulfur dioxide concentration in the stack gas (as measured by the CEMS) expressed in parts per million, stack gas flow rate in standard cubic feet per minute, and sulfur dioxide emission rate in pounds per hour for each day during the calendar quarter.

(2) The dates and times for any period during the quarter when the CEMS was not in operation or not functioning correctly.

(3) The hourly emission rates for any day(s) during the quarter in which the three hour average emission rate exceeded 782 pounds per hour.

(b) ~~Pursuant to Operation Permit #01705,~~ The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of natural gas burned in the Unit 4 furnace (in units of million cubic feet per year), the quantity of alternative fuels burned in the Unit 4 furnace (in units of million pounds), the quantity of spent acid fed to the Unit 4 furnace (in units of tons), the quantity of 100% sulfuric acid produced by Unit 4 (in units of tons per year), and the quantity of chlorides fed to the Unit 4 furnace (in units of tons per year) during the preceding year.

43. D.5.5 (Parametric Monitoring) language was added referring to the Compliance Response Plan.

D.5.5 Parametric Monitoring

The Permittee shall maintain the effluent liquor of the packed-column scrubber at a pH of seven (7) or greater at all times when the spent acid storage tanks are being vented to it. **The Compliance Response Plan for this unit shall contain troubleshooting, contingency and response steps for when the pH is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C – Compliance Monitoring Plan – Failure to Take Response Steps, shall be considered a violation of this permit**. The instrument used for determining the pH shall be calibrated at least once per calendar month.

44. D.5.7 (Reporting Requirements) the reference to the superceded operating permit was removed.

D.5.7 Reporting Requirements

~~Pursuant to Operation Permit #01700,~~ the Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the number of hours that the

spent acid storage tanks were vented to the caustic scrubber during the preceding year.

45. D.6.6 (Record Keeping Requirements) the reference to the superceded operating permit was removed.

D.6.6 Record Keeping Requirements [326 IAC 20-23-1] [326 IAC 12-1-1]

(a) ~~Pursuant to Operation Permit #01701,~~ The Permittee shall record the number of hours that the hazardous waste storage tanks are vented to the flare each calendar year.

46. D.6.7 (Reporting Requirements) the reference to the superceded operating permit was removed.

D.6.7 Reporting Requirements [326 IAC 20-23-1]

(a) ~~Pursuant to Operation Permit #01701,~~ The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the number of hours that the hazardous waste storage tanks were vented to the flare during the preceding year.

47. D.7.6 (Record Keeping Requirements) the reference to the superceded operating permit has been removed.

D.7.6 Record Keeping Requirements [326 IAC 20-23-1] [326 IAC 12-1-1]

(a) ~~Pursuant to Operation Permit #01701,~~ The Permittee shall record the number of hours that the hazardous waste blend tanks are vented to the flare each calendar year.

48. D.7.7 (Reporting Requirements) the reference to the superceded operating permit has been removed.

D.7.7 Reporting Requirements [326 IAC 20-23-1]

(a) ~~Pursuant to Operation Permit #01701,~~ The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the number of hours that the hazardous waste storage tanks were vented to the flare during the preceding year.

49. D.8.6 (Compliance Monitoring Requirements) The time requirement to replace the spent carbon drums has been increased from 2 to 3 weeks.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.6 The Permittee shall test the carbon contained in each of the carbon drums, in accordance with ASTM Method D3467-94, on an annual basis to determine the carbon's life remaining percentage. Should the carbon's life remaining percentage be less than thirty percent (30%), the Permittee shall replace the carbon drum within ~~two (2)~~ **three (3) weeks**.

50. D.8.7 (Record keeping Requirements) the references to the superceded operating permits have been removed.

D.8.7 Record Keeping Requirements

(a) To document compliance with Condition D.8.6**,** the Permittee shall maintain records indicating the dates when the carbon in the CAS was tested or replaced.

(b) ~~Pursuant to Operation Permit #01704,~~ The Permittee shall record the number of hours that the CAS was in use on an annual basis.

(c) ~~Pursuant to Operation Permit #01704,~~ The weight of each shipment of sulfur monochloride received at the facility shall be recorded.

51. D.8.8 (Reporting Requirements) the reference to the superceded operating permit has been removed.

D.8.8 Reporting Requirements

~~Pursuant to Operation Permit #01704,~~ The Permittee shall submit a report to HDEM within 30 days after the end of each calendar year. This report shall include the quantity of sulfur monochloride received in the preceding year. The quantity of sulfur monochloride shall be given in units of tons per year.

Forms

52. Emergency/Deviation Occurrence Report Form is now called the Emergency Occurrence Report. All references to deviations have been removed. These forms should be sent to the Compliance Branch, not the Compliance Data Section.

53. The monthly and quarterly reports will now need to be certified by the responsible official, therefore the last line in each of these reports have been changed from ~~"A certification is not required for this report."~~ to "Attach a signed certification to complete this report".

54. The Quarterly or Semi-Annual Compliance Monitoring Report, is now called the Quarterly Deviation and Compliance Monitoring Report. The form now requires the source to not only report that there were deviations, but to also include the probable cause and the response steps taken.

Name Change

55. On January 5th, 2001, IDEM's Office of Air Management changed its name to the Office of Air Quality. All references in the Permit, TSD and TSD Addendum to the Office of Air Management were changed to the Office of Air Quality. Similarly, all of the OAM abbreviations were changed to OAQ.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE ~~DATA SECTION~~ BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

and

HAMMOND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
5925 Calumet Avenue
Hammond, Indiana 46320
Phone: 219-853-6306
Fax: 219-853-6343

PART 70 OPERATING PERMIT
EMERGENCY~~/DEVIATION~~ OCCURRENCE REPORT

Source Name:
Source Address:
Mailing Address:
Part 70 Permit No.:

This form consists of 2 pages **Page 1 of 2**

~~Check either No. 1 or No.2~~

_ ~~1.~~ This is an emergency as defined in 326 IAC 2-7-1(12)

· The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

· The Permittee must submit notice ~~in writing~~ by mail or ~~by~~ facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2- 7-16

_ ~~2. This is a deviation, reportable per 326 IAC 2-7-5(3)(C)~~

· ~~The Permittee must submit notice in writing within ten (**10**) calendar days~~

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency~~/Deviation~~:
Describe the cause of the Emergency~~/Deviation~~:

If any of the following are not applicable, mark

Page 2 of 2

Date/Time Emergency~~/Deviation~~ started:
Date/Time Emergency~~/Deviation~~ was corrected: Was the facility being properly operated at the time of the emergency/~~deviation~~? Y N Describe: Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency~~/deviation~~:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:_____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

and

Hammond Department of Environmental Management
Air Pollution Control Division

PART 70 OPERATING PERMIT
QUARTERLY ~~(or SEMI-ANNUAL)~~ DEVIATION and COMPLIANCE MONITORING REPORT

Source Name: Rhodia, Inc.
Source Address: 2000 Michigan Street, Hammond, IN 46320
Mailing Address: same
Part 70 Permit No.: T089-7258-00242

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report is an affirmation that the source has met all the ~~compliance monitoring~~ requirements stated in this permit. This report shall be submitted quarterly ***~~(or semi-annually)~~*** based on a calendar year. Any deviation from the ~~compliance monitoring~~ requirements, ~~and~~ the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. ~~with the following exceptions:~~ Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. ~~This form can be supplemented by attaching the Emergency/Deviation Occurrence Report.~~ If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
_ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
_ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD
~~Compliance Monitoring~~ Permit Requirement (specify permit condition #)
Date of ~~each~~ Deviation: **Duration of Deviation:**
Number of Deviations:
Probable Cause of Deviation:
Response Steps Taken:
~~Compliance Monitoring~~ Permit Requirement (specify permit condition #)
Date of ~~each~~ Deviation: **Duration of Deviation:**
Number of Deviations:
Probable Cause of Deviation:
Response Steps Taken:

~~**Compliance Monitoring**~~ **Permit Requirement** (specify permit condition #)	
Date of ~~each~~ Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
~~**Compliance Monitoring**~~ **Permit Requirement** (specify permit condition #)	
Date of ~~each~~ Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
~~**Compliance Monitoring**~~ **Permit Requirement** (specify permit condition #)	
Date of ~~each~~ Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By:

Title/Position: _______

Date: _______

Phone: _______

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality
and
Hammond Department of Environmental Management

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Rhodia Inc.
Source Location:	2000 Michigan Street Hammond, Indiana 46320
County:	Lake
SIC Code:	2819
Operation Permit No.:	T089-7258-00242
Permit Reviewer:	Thomas J. Nyhan

The Hammond Department of Environmental Management (HDEM) has reviewed a Part 70 permit application from Rhodia Inc**.** relating to the operation of a sulfuric acid regeneration facility.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Package Boiler: One (1) natural gas fired boiler, rated at ninety-four point three (94.3) MMBtu per hour, exhausting at one (1) stack, identified as D011. The package boiler is used to provide supplemental plant steam when Unit #4 is not in operation or is unable to meet the demand.

(b) Unit 4 Preheater: One (1) natural gas fired furnace, rated at thirty-four (34) MMBtu per hour, exhausting at one (1) stack, identified as D021. The Unit 4 Preheater is used to heat-up the back half of the sulfuric acid regeneration unit following a prolonged shutdown.

(c) Sulfuric Acid Regeneration Unit (Unit 4): Unit 4 has a maximum acid production rate of 45.83 tons per hour. Raw materials fed to the unit include molten sulfur, spent sulfuric acid, and other sulfur-bearing materials. The unit includes one (1) industrial furnace firing natural gas, RCRA hazardous wastes and non-hazardous materials. The industrial furnace is rated at two hundred sixty (260) MMBtu per hour. Acid mist emissions from Unit 4 are controlled by a Brink's mist eliminator before exhausting through one (1) stack, identified as D031. Sulfur dioxide emissions are controlled in the process by a double absorption system.

(d) Spent Sulfuric Acid Storage Tanks (#s 46, 47, 56, 57, 58): Five (5) spent sulfuric acid storage tanks with a total capacity of 2,650,000 gallons. Emissions from these tanks are controlled by the Unit 4 furnace or the caustic scrubber, should the furnace not be in operation. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D051 when venting to the caustic scrubber. The furnace controls both sulfur dioxide and VOC emissions. The caustic scrubber only controls sulfur dioxide emissions, therefore, operating hour restrictions are placed on the amount of time the spent acid storage tanks can be vented to the scrubber. Spent sulfuric acid tank trucks utilize the same control equipment during unloading activities and will be considered part of this emission unit.

(e) Hazardous Waste Storage Tanks (#s 72, 73, 74, 75): Four (4) hazardous waste storage tanks with a capacity of 8,000 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare, should the furnace not be in operation. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. Hazardous waste tank trucks (except sulfur monochloride trucks covered under Section D.8) utilize the same control equipment during unloading activities and will be considered part of this emission unit. Some atmospheric venting of tank trucks occurs (during open-dome sampling, for example). The company considers these to be insignificant activities.

(f) Hazardous Waste Blend Tanks (#s 70, 71): Two (2) hazardous waste blend tanks with a capacity of 56,400 gallons each. Emissions from these tanks are controlled by the Unit 4 furnace or the flare, should the furnace not be in operation. Exhaust to the atmosphere would be through stack D031 when venting to the furnace and through stack D041 when venting to the flare. These tanks have been separated from the other hazardous waste tanks because they are covered by NSPS.

(g) Sulfur Monochloride Truck Unloading Station: One sulfur monochloride truck unloading station with a maximum unloading rate of 50 tons per hour. HAPs released when sampling, breaking connections, or venting down sulfur monochloride containing trucks (when Unit 4 is not in operation) are controlled by a carbon adsorption system (CAS) which exhausts through a stack identified as D061.

(h) Molten Sulfur Storage Tank: One molten sulfur storage tank (tank 21R) with a capacity of 80,000 gallons. The tank exhausts to the atmosphere through a stack identified as D081. Molten sulfur tank truck unloading will be considered part of this facility.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

John Zink Furnace: One (1) natural gas fired furnace, rated at fifty-one (51) MMBtu per hour, exhausting at one (1) stack, identified as D031. The John Zink Furnace is used to heat-up the front half of the sulfuric acid regeneration unit following a prolonged shutdown.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.

(b) Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.

(c) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hr, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hr.

(d) Combustion source flame safety purging on startup.

(e) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.

(f) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(g) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(h) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(i) Refractory storage not requiring air pollution control equipment.

(j) Filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.

(k) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(l) Machining where an aqueous cutting coolant continuously floods the machining interface.

(m) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(n) Cleaners and solvents characterized as follows:
1) having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;

2) having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(o) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(p) Closed loop heating and cooling systems.

(q) Cutting 20,000 linear feet or less of one inch (1") plate or equivalent.

(r) Using 80 tons or less of welding consumables.

(s) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(t) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(u) Forced and induced draft cooling tower system not regulated under a NESHAP.

(v) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(w) Heat exchanger cleaning and repair.

(x) Process vessel degassing and cleaning to prepare for internal repairs.

(y) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.

(z) Paved and unpaved roads and parking lots with public access.

(aa) Asbestos abatement projects regulated by 326 IAC 14-10.

(bb) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(cc) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(dd) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(ee) On-site fire and emergency response training approved by the department.

(ff) Gasoline generators not exceeding 110 horsepower.

(gg) Diesel generators not exceeding 1600 horsepower.

(hh) Stationary fire pumps.

(ii) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(jj) Purge double block and bleed valves.

(kk) Filter or coalescer media changeout.

(ll) Vents from ash transport systems not operated at positive pressure.

(mm) A laboratory as defined in 326 IAC 2-7-1(20)(C).

(nn) Hazardous and non-hazardous waste drum handling and storage area.

(oo) Hazardous and non-hazardous truck activities.

(pp) Hazardous and non-hazardous container sampling.

(qq) Molten sulfur unloading and storage.

(rr) Ash/brick handling and storage.

(ss) Commercial sulfuric acid storage, loading, and unloading operations (storage tank, rail car and truck).

(tt) Catalyst screening with particulate emission control.

(uu) Portable Brink for acid mist control during maintenance.

(vv) Painting of facility equipment.

(ww) Sand blasting.

(xx) Valves and flanges.

(yy) Roadway fugitive dust.

(zz) Acid filter precoat vent.

(aaa) Wastewater neutalization

(bbb) Tank cleaning.

(ccc) Fresh acid loading.

Existing Approvals

The source has been operating under the following local operation permits

(a) Permit # 01700- spent acid storage and unloading, caustic scrubber, Issued on 2/29/00.

(b) Permit # 01701- hazardous waste storage and unloading, flare, Issued on 2/29/00.

(c) Permit # 01702- package boiler, Issued on 2/29/00.

(d) Permit # 01703- spent acid regeneration unit 4, final Brinks demister, Issued on 2/29/00.

(e) Permit # 01704- sulfur monochloride unloading, carbon adsorption system, Issued on 2/29/00.

(f) Permit # 01705- unit 4 preheater, Issued on 2/29/00.

(g) Permit # 01706- molten sulfur storage tank, bleach/caustic scrubber, Issued on 2/29/00.

(h) Permit # 01699- unit 4 industrial furnace, Issued on 2/29/00.

All conditions from previous approvals were incorporated into this Part 70 permit.

Enforcement Issue

(a) HDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled ***Unpermitted Emission Units and Pollution Control Equipment.***

(b) HDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on 11/20/96. Additional information was received on 9/16/99, 1/4/00, 2/9/00 and 5/17/00.

A notice of completeness letter mailed to the source on 2/18/97.

Emission Calculations

The emission calculations for the only unpermitted emission unit at the source, the John Zink furnace, are located in Appendix A of this document.

Potential Emissions

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential Emissions (tons/year)
PM	>25
PM-10	>25
SO_2	>100
VOC	>25
CO	<100
NO_x	>100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP	Potential Emissions (tons/year)
Hydrochloric Acid, HCl	**>10**
Chlorine, Cl_2	**<10**
Carbon Tetrachloride, CCl_4	**>10**
Carbon Disulfide, CS_2	**>10**
PICs*	**<10**
TOTAL	**>30**

*Products of incomplete combustion from the thermal treatment of hazardous waste. A portion of the PICs are HAPs.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of sulfur dioxide and nitrogen oxides are equal to or greater than 100 tons per year. Potential emissions of volatile organic compounds and particulate matter (PM and PM_{10}) are greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential emissions (as defined in Indiana Rule) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in Indiana Rule) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects 1999 emission data.

Pollutant	Actual Emissions (tons/year)
PM	4.25
PM-10	4.25
SO_2	1423.70
VOC	10.62
CO	6.17
NO_x	73.70
Hydrochloric Acid, HCl	2.41
Chlorine, Cl_2	0.31
PICs*	<0.1

*Products of incomplete combustion (~23 different HAPs)

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Potential to Emit (tons/year)						
Process/ facility	PM	PM-10	SO_2	VOC	CO	NO_x	HAPs
Package Boiler	2.8	2.8	0.3	1.3	15.8	63.1	0.0
Unit 4 Preheater	0.9	0.9	0.1	0.4	5.0	19.9	0.0
Sulfuric Acid Regeneration Unit 4	30.5	30.5	1868.0	0.1	0.0	126.0	18.57
Spent Acid Tanks 46, 47, 56, 57 and 58	0.0	0.0	0.3	11.3	0.0	0.0	0.2
Hazardous Waste Check Tanks 72-75	0.0	0.0	0.0	0.5	2.7	1.0	0.6
Hazardous Waste Blend Tanks 70 & 71	0.0	0.0	0.0	4.2	9.7	1.3	4.4
Sulfur Monochloride Unloading	0.0	0.0	0.0	1.8	0.0	0.0	2.4
Molten Sulfur Storage Tank 21R	0.0	0.0	0.0	0.0	0.0	0.0	0.0
John Zink Furnace	1.4	1.4	0.1	0.6	7.8	31.3	0.0
Total Emissions	35.6	35.6	1868.8	20.2	41.0	242.6	26.17

County Attainment Status

The source is located in Lake County.

Pollutant	Status
TSP	Primary Nonattainment
PM-10	Moderate Nonattainment
SO_2	Primary Nonattainment
NO_2	Unclassifiable/Attainment
Ozone	Severe Nonattainment
CO	Unclassifiable/Attainment
Lead	Unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been classified as nonattainment for TSP, PM_{10}, and SO_2. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(c) Fugitive Emissions
This type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and there is a New Source Performance Standard which regulates sulfuric acid plants (40 CFR Part 60, Subpart H). Therefore, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

New Source Performance Standards (NSPS)

(a) 40 CFR Part 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, does not apply to Unit 4 because the facility was not constructed or modified after August 17, 1971. There was some discussion with the company (as well as IDEM and EPA officials) regarding whether or not the replacement of the final absorption tower in 1997 should be considered a modification. With the inclusion of data obtained from a 1999 acid mist stack test, it is believed that no increase in emissions occurred as a

result of the tower's replacement and therefore the replacement does not constitute a modification.

(b) Due to the vapor pressure of the spent acid stored in tanks #s 46, 47, 56, 57, and 58, these tanks are not subject to 40 CFR Part 60, Subparts K, Ka, and Kb. A more detailed explanation is given in Section B.14 of the permit.

(c) The hazardous waste blend tanks 70 & 71 are subject to the New Source Performance Standard, 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This rule requires that these fixed-roof tanks be equipped with a closed vent system and control device. The rule also places standards on the operation of the control device and vent system. There are record keeping and reporting requirements associated with this rule. Rhodia's hazardous waste storage tanks #s 70-75 are exempted from the monitoring requirements of 40 CFR 60.116b(c) and 40 CFR 60.116b(d) by 40 CFR 60.116b(g). This is because the tanks are equipped with a closed vent system and control device. Because of their lower capacity, the rule only requires that Rhodia keep readily accessible records showing the dimensions of the hazardous waste check tanks #s 72 - 75 and an analysis showing the capacity of these storage vessels. All the pertinent sections of the rule have been incorporated in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

(a) This source is not subject to the requirements of 40 CFR Part 61, Subpart J, National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene because the plant site is designed to produce or use less than 1,000 megagrams of benzene per year.

(b) This source is not subject to the requirements of 40 CFR Part 61, Subpart Y, National Emission Standard for Benzene Emissions from Benzene Storage Vessels because the specific gravity of the benzene containing liquid at the facility is outside the range specified in 40 CFR 61.270(a).

(c) This source is not subject to the requirements of 40 CFR Part 61, Subpart BB, National Emission Standard for Benzene Emissions From Benzene Transfer Operation because 40 CFR 61.300(a) exempts loading racks at which only benzene - laden waste is loaded.

(d) This source is subject to the requirements of 40 CFR Part 61, Subpart FF, National Emission Standards for Benzene Waste Operations because the source is a hazardous waste treatment, storage and disposal facility which receives benzene containing hazardous waste from facilities listed in 40 CFR 61.340(a). The requirements of this subpart pertain to all of the hazardous waste storage tanks, the flare, the industrial furnace, hazardous waste tank trucks and all connecting vent piping. Similar to NSPS subpart Kb and NESHAP subpart DD, the hazardous waste storage tanks are required to have a fixed roof vented to a control device. Operational parameters of the control device and treatment process (the industrial furnace) must be recorded and inspected on a daily basis. The benzene contained in the off-site material stream must be destroyed using an industrial furnace which has been issued a final permit under 40 CFR Part 270, Subpart H and achieves a destruction efficiency of 99% or greater for benzene. All the pertinent sections of the rule have been incorporated into the permit. In cases where the requirements of this rule were already incorporated into the permit as part of NSPS Subpart Kb (or any

other NSPS or NESHAP rule) the redundant requirements were omitted. In cases where the standards were different, the most stringent standard was utilized in the permit.

(e) This source is not subject to the requirements of 40 CFR Part 63, Subpart B, Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j), because it was not constructed or reconstructed after the effective date of section 112(g)(2)(B).

(f) This source is not subject to the requirements of 40 CFR Part 63, Subparts F and G, because it does not manufacture as a primary product any of the chemicals listed in Table 1 of Subpart F.

(g) This source is not subject to the requirements of 40 CFR Part 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers, because the cooling towers at the source do not operate with chromium-based water treatment chemicals.

(h) This source is not subject to the requirements of 40 CFR Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning because the source's parts washers do not use any of the halogenated solvents listed in 40 CFR 63.460.

(i) This source is subject to the requirements of 40 CFR Part 63, Subpart DD, National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, because the plant is a major source of hazardous air pollutant (HAP) emissions and the facility is regulated as a hazardous waste treatment, storage and disposal facility (TSDF) under 40 CFR Part 264. The requirements of this subpart pertain to all of the hazardous waste storage tanks, the flare, the industrial furnace, hazardous waste tank trucks and all connecting piping and transfer equipment. Similar to NSPS subpart Kb, the hazardous waste storage tanks are required to have a fixed roof vented to a control device. Operational parameters of the control device must be recorded. Equipment leaks must be controlled. The HAP contained in the off-site material stream must be destroyed using an industrial furnace which has been issued a final permit under 40 CFR Part 270, Subpart H. All the pertinent sections of the rule have been incorporated into the permit. In cases where the requirements of this rule were already incorporated into the permit as part of NSPS Subpart Kb (or any other NSPS or NESHAP rule) the redundant requirements were omitted. In cases where the standards were different, the most stringent standard was utilized in the permit. The compliance date for Subpart DD (as it pertains to Rhodia) is 7/1/99.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) on 12/13/96. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-2 (Records; Notice of Malfunction)

This source is subject to 326 IAC 1-6-2. Pursuant to the rule, this source shall keep a record of all malfunctions, including startups or shutdowns of any facility or emission control equipment which result in violations of applicable air pollution control regulations or applicable emission limitations and such records shall be retained for a period of three (3) years and shall be made available to the commissioner upon request. When a malfunction of any

facility or emission control equipment lasts more than one (1) hour, said condition shall be reported to HDEM no later than four (4) business hours after the beginning of said occurrence.

326 IAC 1-6-3 (Preventive Maintenance Plans)

The source has submitted a Preventive Maintenance Plan (PMP) on 3/26/97. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-2 (PSD Requirements) and 326 IAC 2-3 (Emission Offset)

This source is a major stationary source because it has the potential to emit sulfur dioxide at 100 tons per year or more and is one of the 28 listed source categories. In addition to sulfur dioxide this source exceeds the emission offset major source thresholds for PM10 and NOx. This source was constructed in the 1950s and predates the emission offset rule. Additionally, there has not been a major modification, as defined in 326 IAC 2-2 or 2-3, at this source subject to review under these rules.

The source has taken a voluntary limit on the number of hours the spent acid storage tanks can be vented to the caustic scrubber to limit the VOC emissions below the emission offset major source threshold for this pollutant.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than 100 tons per year of sulfur dioxide. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15th of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4-2 (Fugitive Dust Emission Limitations)

This source is subject to 326 IAC 6-4 (Fugitive Dust). Rhodia shall comply with the following regulations on fugitive dust emissions:

(a) Dust concentrations downwind of the source cannot be in excess of 67% higher than the ambient upwind concentration.

(b) The downwind ambient air concentration of dust cannot exceed fifty (50) micrograms per cubic meter above background concentrations for a sixty (60) minute period.

(c) Fugitive dust cannot be allowed to visibly cross the property or boundary line of the source.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

This source is not subject to 326 IAC 8-3 because its degreasers do not meet the applicability criteria established in 326 IAC 8-3-1. One of the source's degreasers is exempted because it does not use an organic solvent. The source's other degreaser is not regulated under 326 IAC 8-3 because it is a cold cleaner degreaser with remote solvent reservoir and it was installed prior to 1980.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)

This source is not subject to 326 IAC 8-7, because it does not have the potential to emit over twenty-five (25) tons per year of VOC.

State Rule Applicability - Individual Facilities

326 IAC 6-1-10.1(d) (Lake County PM10 Emission Requirements)

Several facilities at this source are subject to specific emission limits established in 326 IAC 6-1-10.1(d). Pursuant to 326 IAC 6-1-10.1(d), PM10 emission limits are established as follows:

Facility	Emission Limit	Emission Limit (lbs/hr)
Package Boiler	0.007 lbs/MMBtu	0.755
Preheater	0.007 lbs/MMBtu	0.230
Unit 4	0.150 lbs/ton acid produced	6.958 (acid mist)

326 IAC 7-4-1.1(c) (Lake County Sulfur Dioxide Emission Limitations)

Rhodia's Unit 4 is subject to requirements established in 326 IAC 7-4-1.1(c). Requirements for Unit 3 are also established in 326 IAC 7-4-1.1(c). Unit 3 has been taken out of service, therefore, rules regulating both units have been changed so that they apply only to Unit 4 and rules which only apply when Unit 3 is in operation have been omitted. Pursuant to 326 IAC 7-4-1.1(c)(19), sulfur dioxide emission limits, CEM and reporting requirements are established as follows:

(a) Sulfur dioxide emissions from Unit 4 shall be less than or equal to 782 pounds per hour, on a three hour average basis.

(b) Rhodia shall operate a continuous emission monitoring system (CEMS) on the stack serving Unit 4. The CEMS shall be operated in accordance with 326 IAC 3-1.1, and records of hourly emissions data shall be maintained and submitted to the department upon request.

(c) Rhodia shall submit a report to the department within thirty days after the end of each calendar quarter. The report shall contain the three hour average sulfur dioxide

emission rate in pounds per hour as measured by the CEMS for each three hour period in which the average emissions exceed 782 pounds of sulfur dioxide per hour.

(d) Sulfur dioxide emissions from the preheater and package boiler shall be limited to 0.3 pounds per hour, each.

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

326 IAC 8-9 is not applicable to the spent acid storage tanks 46, 47, 56, 57 and 58 because the maximum vapor pressure of the spent acid is not greater than or equal to 0.5 psi. 326 IAC 8-9 is applicable, however, to the hazardous waste storage tanks 70-75. Rhodia shall install a closed vent system and control device for tanks 70 and 71. Rhodia shall comply with all the conditions below for tanks 70 & 71. Tanks 72-75 only need to comply with condition (i), because their maximum storage capacity is less than 39,000 gallons each. In cases where the requirements of this rule were already incorporated into the permit as part of NSPS Subpart Kb (or any other NSPS or NESHAP rule) the redundant requirements were omitted. In cases where the standards were different, the most stringent standard was utilized in the permit.

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, 60.485(b).

(b) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device. It shall meet the specifications described in the general control device requirements (60.18) of the General Provisions.

(c) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the administrator in accordance with 40 CFR 60.113b, paragraph (c)(1), unless the plan was modified by the administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, 60.18 (e) and (f).

(e) The owner or operator shall keep a copy of the operating plan for the control device.

(f) The owner or operator shall keep a record of the measured values of the parameters monitored in accordance with the operating plan required under 60.113b(c)(1).

(g) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(h) Semiannual reports of all periods recorded under 60.115b(d)(2) in which the pilot flame was absent shall be furnished to the administrator.

(i) The owner or operator of each storage vessel as specified in 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

Testing Requirements

Pursuant to Operation Permit #01703, the Permittee is required to perform an annual performance test on Unit 4 in order to demonstrate compliance with the acid mist and sulfur dioxide emission limits established in 326 IAC 6-1-10.1(d) and 326 IAC 7-4-1.1(c)(19), respectively. Compliance with the SO_2 and acid mist emission limits specified in Conditions D.4.1 and D.4.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing utilizing Method 8 (40 CFR Part 60, Appendix A).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance determination requirements applicable to this source are as follows:

Package Boiler

None

Unit 4 Preheater

None

John Zink Furnace

D.3.3 The John Zink Furnace shall be fuelled by natural gas only.

Sulfuric Acid Regeneration Unit (Unit 4)

D.4.6 Control of Particulate Emissions (PM_{10})

Unit 4 shall be vented to the final Brink's mist eliminator at all times while the unit is in operation.

D.4.7 Control of Hazardous Air Pollutants (HAPs)

Pursuant to 40 CFR Part 61, Subpart FF, each opening in the industrial furnace shall be designed to operate with no detectable emissions as indicated by an instrument

reading of less than 500 ppmv above background as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

D.4.8 Continuous Emissions Monitoring Requirement [326 IAC 7-4-1.1(c)]

Pursuant to 326 IAC 7-4-1.1(c), the Permittee is required to operate a continuous emission monitoring system (CEMS) in the stack serving Unit 4. The CEMS shall be operated and maintained in accordance with an IDEM and HDEM approved standard operating procedure (SOP) submitted to the agencies by the Permittee. The CEMS shall be maintained in accordance with procedures established in Section C.13 - Maintenance of Monitoring Equipment.

Spent Sulfuric Acid Storage Tanks (#s 46, 47, 56, 57, 58)

D.5.5 Control of Volatile Organic Compounds (VOCs)

The spent acid storage tanks shall be vented to either the Unit 4 furnace or the caustic scrubber at all times the tanks contain spent acid. The Unit 4 furnace and caustic scrubber shall be in operation while the spent acid storage tanks are being vented to them. The Unit 4 furnace shall be operating in accordance with Section D.4 at all times when the spent acid storage tanks are being vented to it. The caustic scrubber shall be operating in accordance with Condition D.5.6 at all times while the spent acid storage tanks are vented to it.

Hazardous Waste Storage Tanks (#s 72, 73, 74, 75)

D.6.4 Control of Hazardous Air Pollutants (HAPs)

Pursuant to 40 CFR Part 63, Subpart DD (National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations), air emissions from the hazardous waste storage tanks shall be controlled in the following manner:

(a) The tanks shall be covered by a fixed roof and vented directly through a closed-vent system to a control device.

(b) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(c) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. The closure device shall be designed to operate with no detectable organic emissions as determined by the procedure in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, each opening shall be inspected at least once per year.

(d) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life.

(e) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(1) When access into the tank is needed to perform routine maintenance, inspections or other activities needed for normal operations.

(2) To remove accumulated sludge or other residues.

(3) Opening of a safety device is allowed at any time conditions require it to do so to avoid an unsafe condition.

(4) Following the completion of the activities listed in e) 1-3 above, the owner or operator shall promptly secure the closure device in the closed position.

(f) The vent stream required to be controlled shall be conveyed to the control device by a closed-vent system designed and operated with no detectable organic emissions using the procedure specified in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, the closed vent system shall be inspected at least once per year.

(g) The control device used to control emissions from the hazardous waste storage tanks shall be one of the following:

(1) An industrial furnace which complies with the requirements of 40 CFR Part 266 Subpart H. Whenever the furnace is being utilized to control air emissions from the hazardous waste storage tanks, the furnace oxygen level, temperature and combustion gas velocity shall meet the minimum and maximum requirements established in the most recent compliance test.

(2) A flare designed and operated in accordance with the requirements of 40 CFR 63.11(b). To meet the monitoring requirements, the owner or operator shall use a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(3) Pursuant to 40 CFR Part 61, Subpart FF, the data on the furnace oxygen level, temperature, and combustion gas velocity as well as the status of the flare's pilot flame shall be inspected by the Permittee on a daily basis.

(h) The owner or operator shall control the HAP emitted from equipment leaks in accordance with the applicable provisions of sections 63.162 through 63.182 in 40 CFR Part 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks.

(i) Pursuant to 40 CFR Part 63, Subpart DD, air emissions from all tank trucks containing an off-site material (as defined in 40 CFR 63.681) shall be controlled in accordance with the standards for Container Level 2 controls as specified in 40 CFR Part 63, Subpart PP, National Emission Standards for Containers.

(j) Pursuant to 40 CFR Part 63, Subpart DD, air emissions from liquid or solid off-site material transfer systems (i.e. pipes, hoses) shall be controlled by the use of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(k) Pursuant to 40 CFR Part 63, Subpart DD, air emissions from liquid or solid off-site material transfer systems that are also individual drain systems shall be controlled in accordance with the standards specified in 40 CFR Part 63, Subpart RR, National Emission Standards for Individual Drain Systems.

(l) Pursuant to 40 CFR Part 61, Subpart FF, each fixed-roof, seal, access door, and all other openings in the tank shall be checked by visual inspection quarterly to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly. Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

(m) Pursuant to 40 CFR Part 61, Subpart FF, each closed-vent system and control device shall be visually inspected quarterly. The visual inspection shall include inspection of the ductwork, piping, and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections. Except as provided in 40 CFR 61.350, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

Hazardous Waste Blend Tanks (#s 70, 71)

D.7.4 Control of Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs)

Pursuant to 40 CFR Part 63, Subpart DD, National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations (except as otherwise indicated), air emissions from the hazardous waste blend tanks shall be controlled in the following manner:

(a) The tanks shall be covered by a fixed roof and vented directly through a closed-vent system to a control device.

(b) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(c) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. The closure device shall be designed to operate with no detectable organic emissions as determined by the procedure in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, each opening shall be inspected at least once per year.

(d) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life.

(e) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(1) When access into the tank is needed to perform routine maintenance, inspections or other activities needed for normal operations.

(2) To remove accumulated sludge or other residues.

(3) Opening of a safety device is allowed at any time conditions require it to do so to avoid an unsafe condition.

(4) Following the completion of the activities listed in e) 1-3 above, the owner or operator shall promptly secure the closure device in the closed position.

(f) The vent stream required to be controlled shall be conveyed to the control device by a closed-vent system designed and operated with no detectable organic emissions using the procedure specified in 40 CFR 63.694(k). Pursuant to 40 CFR Part 61, Subpart FF, the closed vent system shall be inspected at least once per year.

(g) The control device used to control emissions from the hazardous waste storage tanks shall be one of the following:

(1) An industrial furnace which complies with the requirements of 40 CFR Part 266 Subpart H. Whenever the furnace is being utilized to control air emissions from the hazardous waste storage tanks, the furnace oxygen level, temperature and combustion gas velocity shall meet the minimum and maximum requirements established in the most recent compliance test.

(2) A flare designed and operated in accordance with the requirements of 40 CFR 63.11(b). To meet the monitoring requirements, the owner or operator shall use a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(3) Pursuant to 40 CFR Part 61, Subpart FF, the data on the furnace oxygen level, temperature, and combustion gas velocity as well as the status of the flare's pilot flame shall be inspected by the Permittee on a daily basis.

(h) Pursuant to 40 CFR Part 60, Subpart Kb, the control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device. It shall meet the specifications described in the general control device requirements (60.18) of the General Provisions.

(i) Pursuant to 40 CFR Part 60, Subpart Kb, The Permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the administrator in accordance with 40 CFR 60.113b, paragraph (c)(1), unless the plan was modified by the administrator during the review process. In this case, the modified plan applies.

(j) The Permittee shall control the HAP emitted from equipment leaks in accordance with the applicable provisions of sections 63.162 through 63.182 in 40 CFR Part 63 Subpart H, National Emission Standards for Organic Hazardous Air Pollutants from Equipment Leaks.

(k) Pursuant to 40 CFR Part 63, Subpart DD, air emissions from all tank trucks containing an off-site material (as defined in 40 CFR 63.681) shall be controlled in accordance with the standards for Container Level 2 controls as specified in 40 CFR Part 63, Subpart PP, National Emission Standards for Containers.

(l) Pursuant to 40 CFR Part 63, Subpart DD, air emissions from liquid or solid off-site material transfer systems (i.e. pipes, hoses) shall be controlled by the use of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(m) Pursuant to 40 CFR Part 63, Subpart DD, air emissions from liquid or solid off-site material transfer systems that are also individual drain systems shall be controlled in accordance with the standards specified in 40 CFR Part 63, Subpart RR, National Emission Standards for Individual Drain Systems.

(n) Pursuant to 40 CFR Part 61, Subpart FF, each fixed-roof, seal, access door, and all other openings in the tank shall be checked by visual inspection quarterly to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly. Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

(l) Pursuant to 40CFR Part 61, Subpart FF, each closed-vent system and control device shall be visually inspected quarterly. The visual inspection shall include inspection of the ductwork, piping, and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections. Except as provided in 40 CFR 61.350, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

Sulfur Monochloride Truck Unloading

D.8.5 Control of Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOCs)

The Permittee shall vent all sulfur monochloride tank trucks to the CAS or their industrial furnace. No direct atmospheric venting of sulfur monochloride tank trucks shall be performed.

Molten Sulfur Storage Tank

D.9.3 Nuisance Odor Prevention

The Permittee shall take all steps necessary, including the cessation of sulfur tank truck unloading, to maintain compliance with the nuisance provision of Hammond Ordinance No. 3522.

The compliance monitoring requirements applicable to this source are as follows:

Package Boiler

D.1.5 PM_{10} Continuous Compliance [326 IAC 6-1-10.1]

Pursuant to the source's continuous compliance plan, continuous compliance with the PM_{10} emission limitation shall be demonstrated by measuring the volume of natural gas fired in the package boiler on an hourly basis and multiplying that volume by the corresponding AP-42 emission factor. The equation used to calculate PM_{10} emissions is as follows:

To determine PM10 emission rate in lbs/hr:

PM10 emissions =[measured gas volume (ft^3/hr)]*[AP-42 FACTOR (5 LB/10^6 FT^3)]

Unit 4 Preheater

D.2.5 PM_{10} Continuous Compliance [326 IAC 6-1-10.1]

Pursuant to the source's continuous compliance plan, continuous compliance with the PM_{10} emission limitation shall be demonstrated by measuring the volume of natural gas fired in the Unit 4 Preheater on an hourly basis and multiplying that volume by the corresponding AP-42 emission factor. The equation used to calculate PM_{10} emissions is as follows:

To determine PM10 emission rate in lbs/hr:

PM10 emissions =[measured gas volume (ft^3/hr)]*[AP-42 FACTOR (6.2 LB/10^6 FT^3)]

John Zink Furnace

D.3.5 Parametric Monitoring

The Permittee shall measure the quantity of natural gas burned in the John Zink Furnace on an annual basis.

Sulfuric Acid Regeneration Unit (Unit 4)

D.4.9 Parametric Monitoring

Pursuant to 40 CFR Part 61, Subpart FF, the pressure in the industrial furnace shall be monitored continuously to ensure that the pressure remains below atmospheric pressure.

D.4.10 PM_{10} Continuous Compliance [326 IAC 6-1-10.1]

(a) Pursuant to the source's continuous compliance plan, continuous compliance with the acid mist emission limitation shall be demonstrated by calculating the sulfuric acid production rate and multiplying that rate by an acid mist emission factor obtained from the most recent performance test. The acid mist emission factor will be obtained by dividing the highest acid mist emission rate measured during the test by the lowest sulfuric acid production rate. The equation used to calculate acid mist emissions is as follows:

To determine acid mist emission rate in lbs/hr:

Acid mist emissions =[emission factor from stack test (lb/ton)]*[production rate (tons/hr)]

(b) Pursuant to the source's continuous compliance plan, the pressure drop across the final Brink's mist eliminator shall not exceed twenty-seven (27) inches of water column.

Spent Sulfuric Acid Storage Tanks (#s 46, 47, 56, 57, 58)

D.5.6 Parametric Monitoring

The Permittee shall maintain the effluent liquor of the packed-column scrubber at a pH of seven (7) or greater at all times when the spent acid storage tanks are being vented to it. The instrument used for determining the pH shall be calibrated at least once per calendar month.

Hazardous Waste Storage Tanks (#s 72, 73, 74, 75)

None

Hazardous Waste Blend Tanks (#s 70, 71)

None

Sulfur Monochloride Truck Unloading

D.8.6 The Permittee shall test the carbon contained in each of the carbon drums, in accordance with ASTM Method D3467-94, on an annual basis to determine the carbon's life remaining percentage. Should the carbon's life remaining percentage be less than thirty percent (30%), the Permittee shall replace the carbon drum within two (2) weeks.

Molten Sulfur Storage Tank

None

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the 1990 Clean Air Act. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those which constitute a major source according to Section 112 of the 1990 Amendments to the Clean Air Act.

(b) See attached calculations for detailed air toxic calculations (Appendix A, page 23).

Conclusion

The operation of this sulfuric acid regeneration facility shall be subject to the conditions of the attached proposed **Part 70 Permit No. T089-7258-00242.**

Appendix A
Emission Calculations

Emission Calculations

The following are the emission calculations for the only unpermitted emission unit at the source, the John Zink furnace. The emission factors were taken from AP-42 for small industrial boilers (<100 mmBtu).

Pollutant	Emission Factor (lb/mmcft))	Natural Gas Heat Content (Btu/cft)	Furnace Max. Design Capacity (mmBtu/hr))	Emission Rate (tons/year)
PM	7.6	1000	51	1.7
PM-10	7.6	1000	51	1.7
SO_2	0.6	1000	51	0.1
VOC	2.8	1000	51	0.6
CO	35.0	1000	51	7.8
NO_x	140.0	1000	51	31.3

The following is a summary of the air toxic emissions from the source:

Facility	Pollutant	Comments	Emission Rate (tons/year)
Unit 4	Hydrochloric Acid	4.91 lbs. per ton of chloride feed, based on 1996 stack test. Allowable chloride feed under RCRA Part B Permit is 7266 tons.	17.838
	Chlorine	0.17 lbs per ton of chloride feed, based on 1996 stack test.	0.618
	PICs*	Based on 99.9999% DRE achieved in most recent stack test and maximum allowable hazardous waste feed (under RCRA Part B Permit).	0.102
Spent Acid Storage Tanks Vented to Caustic Scrubber	VOCs	From 1999 Emission Inventory	1.829
Spent Acid Sampling and Loading	VOCs	From 1999 Emission Inventory	3.190
Equipment Leaks in Spent Acid Storage Area	VOCs	From 1999 Emission Inventory	1.323
Hazardous Waste Storage Vessels Vented to Flare	PICs	From 1999 Emission Inventory	1.404
	Hydrochloric Acid	From 1999 Emission Inventory	0.984
	Chlorine	From 1999 Emission Inventory	0.130
Hazardous Waste Sampling and Inspection	VOCs	From 1999 Emission Inventory	1.052
Equipment Leaks in Hazardous Waste Storage Area	VOCs	From 1999 Emission Inventory	1.735
Sulfur Monochloride Tank Trucks	Hydrochloric Acid	From 1999 Emission Inventory	0.001
Total			**30.206**

*PICs are products of incomplete combustion. A portion of these are air toxics. Stack tests have been conducted to determine individual chemical components. These components (just as with the VOCs listed in the table) vary with hazardous waste and spent acid composition as well as with the operating conditions of the furnace or flare. For the purposes of these calculations, all PICs and VOCs were considered to be HAPs and air toxics.